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Social science's fight-back

Last week's manifesto from the new Social Science Action Committee is a much more discreet and tentative attack on the present drift of government policy than the all-out frontal assault launched by the Keynesian and allied economists following the budget (although both suffer from the same failure of numerical symbolism: how much better a "gang of 12" would have been than one only of 11 and why stop at 364 economists even if it was the vocation?). Nor is this new attack expressed in extravagant language. Its most threatening phrase is "prejudiced conflict is not conducive to social order."

Moreover its scope is more limited. The 11 distinguished social scientists who signed the manifesto are not telling the Government, as their economist colleagues attempted to do, how to run the country; they are simply pointing out carefully and calmly how damaging its present policy towards higher education may be to the academic vitality of Britain and emphasizing how that vitality is an important element in promoting the orderly development of the social order.

Such modesty concentrates rather than dilutes the message which the Social Science Action Committee is trying to communicate to Mr Carlisle and through him to the Government and to a perhaps uncaring public. It is a message that deserves to be heard and, we would argue, heeded. In the 1960s and early 1970s there may well have been an exaggerated investment (of expectations rather than of resources) in the potential of the social sciences: in intellectual terms they appeared imperialist disciplines, threatening to dominate the humanities while elbowing aside the physical sciences and technologies. In policy terms too, the post-war vigour of the social sciences suggested, rather than claimed, an immediate application to social amelioration which has not really been achieved in the years of growing austerity and creeping neo-conservatism since 1975.

But the pendulum has swung far too far in the other direction. The social sciences today seem to be under attack on many fronts. They appear to be dwindling in popularity among poten-

tial students who are streaming back to more conventional and traditional disciplines, perhaps a symptom, perhaps a cause of their tumbling prestige. Intellectually too they are on the defensive, accused of a host of offences including partiality and lack of academic rigour. Politically they seem often to be regarded as suspect or even subversive. As a result in the Darwinian world of the contemporary British university they are a prey to many predators, internal and external.

So it is very important that social scientists should begin to fight back against the ignorance, prejudice and hostility which their academic and political enemies so lightly display. It is very important that the balance should be restored. The centrality of the social sciences (although not, of course, their exclusivity) in a modern university attempting to cater to a semi-mass student body and to keep open lines of communication with the wider society needs to be underlined.

In this necessary fight back social science must depend essentially on its own resources rather than look to external and bureaucratic allies

In this necessary fight back social science must depend essentially on its own resources rather than look to external and bureaucratic allies. The counter-attack must be founded securely on the academic value of the social sciences and their proved social utility rather than on the shifting and ill-founded fashion of the Social Science Research Council, as it struggles to nourish the various social sciences as disciplines of knowledge and at the same time to act as a sponsoring agency for their useful application, is a flawed instrument for such a defence. It is perhaps in this context that the creation of a Social Sciences Academy might be particularly important, as a

secure base in which the collective academic self-esteem of the various disciplines could be stimulated.

However, it would be misleading to regard last week's manifesto as simply an example of selfish special pleading by social scientists. In two other respects, at least as important and certainly more immediate, the statement is of considerable significance and value. First, it is a persuasive repudiation of the crude instrumentalism which now dominates our public view of the value of higher education. It sometimes seems that if it is not engineering or some science discipline which can document its success with a string of multi-thousand pound research grants then it is not worth bothering with – and this Government has done everything to encourage such an atavistic attitude. It is important for the social sciences, particularly perhaps for the "softer" ones that are often also the most entwined politically, and even more important for the humanities that this crude populism should be rejected and that the value of universities and other institutions should be judged against criteria that are academically valid and socially sophisticated not against the crude criteria of ephemeral utilitarianism.

Secondly, this document is another alarming piece of evidence of the yawning gap that is opening up between the present Government and educated opinion in the country. If this gap continues to widen the results could be alarming. The Government on its side could come to regard the multi-million pound investment of the nation in education as quite irrelevant to the solution to the economic and social problems that we will face in the 1980s. Its dismissive attitude to the collection of social statistics is evidence that such a philistine attitude to the potential of organized knowledge is already well established. Higher education for its part might increasingly become the refuge of an oppositional intelligentsia working in uneasy harness in common institutions with the expert corps of the amoral technocratic state – not a happy recipe for the preservation of a liberal university tradition.

Support your local UGC

The universities' response to the letters that we have received from the University Grants Committee this week will have to be a two-phase operation.

The first phase will consist of the urgent tidying-up decisions on admissions principally, but also other questions that must be settled quickly. Inevitably such decisions will have to be based on quick and perhaps rough-and-ready calculations of just how far an individual university's grant can be stretched. Inevitably also in a time of continuing uncertainty about salaries and inflation some of these calculations will be got wrong. The equally inevitable grief that will result will be the sole and heavy responsibility of the Government which has tried to railroad through a policy of austerity in a recklessly short time.

The second phase will consist of the universities' reactions to the advice about academic priorities which the UGC has given to them in the letters of guidance that accompanied the grant allocations. Here, there will be a little more time and a little less pressure. Once the urgent financial decisions have been taken there will be a few months in which these larger issues can be considered.

It is important that this second phase should be as calm and considered as possible. On its outcome will depend both the bargaining power of the UGC with the Government in future clashes on public expenditure and perhaps the emerging shape of a post-Robbins university system. Understandably, but nevertheless sadly, the initial response to "leaks" about the UGC's intentions was rather exaggerated and even neurotic. Now that the letters have been actually sent out it should be possible to see future events in a more mature perspective.

Already several things are clear. The UGC is not trying to act like the Prussian High Command dictating every movement and controlling every timetable. Admittedly its letters are more dirigiste, to adopt the compulsory adjective, than earlier letters set out from Park Crescent, but it can hardly be argued that their tone or content is wildly at odds with the past practice of the committee. Further, the UGC has always had to talk to two constituencies, the Government and the universities, and often this dialogue has had to be oblique and suggestive rather than direct and unambiguous. People in universities should always remember that a high proportion of UGC advice and hints and warnings are aimed at persuading Government to loosen its

grip on the money.

So far as the universities are concerned the UGC is trying to do two things in its letters of guidance. First, it is trying to bully universities into thinking more seriously and more urgently about academic priorities (and, of course, to provide a national perspective as a context for this consideration of priorities). So in a significant sense all the unofficial "leaks" and now official guidance can be regarded as an exercise in consciousness raising by the UGC, an exercise that might well have been necessary even if there had been no cuts because of demographic, manpower, and other factors. The UGC is really saying to universities "do something" as much as it is saying "do what we tell you."

Secondly, the UGC is trying, very much against the odds, to prevent the present reduction in public expenditure on universities resulting in an effective policy of "equal misery", or perhaps more accurately "random misery". It is trying, not entirely hopefully, to oppose the inevitable inertia of the university system and create just a little room for hopeful change. Of course, there is a lot of room for disagreement about the detailed guidance being given by the committee – the UGC can hardly expect unanimous submission or even wish for it – but its broad strategy deserves support.

Laurie Taylor



Dear Vice-Chancellor,

Further to your request of June 22, I am now pleased to enclose a list of the major publications by members of this department in the academic year 1980-81.

Scrut, Bill (Dr) 'Smash the Bosses Now!', *Big Red Axe*, March 18, 1981.
Puerile, Richard (Dr) *Contributions to Penguin Dictionary of Contemporary Political Concepts*, 'U-turn', 'Monetarist', 'Heseltine', Harmondsworth 1981.
Dreggs, Arthur Fairly long letter to *The Listener* about lack of buffet service on 7 am train from Kings Cross to Doncaster, April 6 1981.
Wincetyne, Amanda (Dr) 'Vaginal Cream: Who Cares?', *Guardian Women*, October 14 1980.
Turncote, Raymond (Prof) 'The Exciting Promise of Monetarism', *The Economist*, July 3 1980.
'Stop Printing Money', *Aims of Industry Bulletin*, September 6 1980, 'Slash Public Spending Now', *The Daily Telegraph*, November 9 1980. 'The Attack upon the Universities', *The Guardian*, January 12 1981. 'Who Killed Robbins', *New Statesman*, March 6 1981. 'Not One Job Must Be Lost', *AUT Bulletin*, May 11 1981.

Prostate, Jeremy (editor of *Monographs on Sexual Aberrations in Isolated Communities*) No 1, Mull, 2, Uist, 3, Milton Keynes. *Loughborough University Press* 1981.
Cake, Leonard (Dr) Nothing this year but in fact I've got several things which are likely to come off in the near future. I mean only the other day this chap from Martin Robertson came to see me and said he was "very interested" (not just "interested") in something that I was thinking about in the general area of race relations, you know in cities, and riots and that sort of thing.

Lissom, Fay (Dr) *Ragwort and Daffodils: A Bouquet of Love Poems*. Wilson, Keppel and Betty (Gothenberg) 1980.
Lustgarten, Edwin Don to a *Turn: a Cookery Book for the Discerning Academic*. Olympia Press (Paris) 1981.
Wotan, Thor (Visiting Fellow) *Ansloggen Kest Diplunkit - Vashackal*. (Thackerick) *Mushmalistai Vok 2 No 47* (Draknist).

© TIMES NEWSPAPERS
Published by Times Newspapers, PO Box 1, London EC1A 3SE. Printed by Computer Graphics Ltd, 100, Upper Weymouth, Northampton NN1 6JH. Telephone 0603 60121. ISSN 0307-6512.

The Times Higher Education Supplement

July 10, 1981 No 453 Price 45p

Cabinet gives go-ahead to national body

by John O'Leary

A draft Green Paper setting out two alternatives for a national body for colleges and polytechnics was approved by a Cabinet committee this week having already caused a split with local authority leaders.

The consultative document, which Mr Mark Carlisle, Secretary of State for Education, hopes to publish before the end of the month, would pose a choice between the Department of Education and Science's leaked plans for central control and those favoured by the Council of Local Education Authorities.

But CLEA officers were not satisfied with the one-page summary devoted to their proposals and now intend to release them in full next week. They sent a strongly-worded letter Mr Carlisle expressing no confidence in the DES to portray the CLEA alternative satisfactorily.

Mr Alistair Lawton, chairman of CLEA, said this week that he could not accept in advance that the authorities' proposals would be fully explained since he had not been consulted on the final wording of the draft. "The extent to which they can faithfully represent our views is necessarily limited," he said.

Mrs Nicky Harrison, chairman of the Association of Metropolitan Authorities, said: "It seemed to us that the DES were picking out little bits that suited them. We would rather

they left them out altogether but we have no say over what goes in a Green Paper."

Although a lengthy document of some 50 paragraphs, the draft Green Paper concentrated on only two main contenders for a new body, presenting the basic choice between continued local authority presence in higher education and direct central control. Consultation is expected to take place throughout the summer and early autumn.

But Mr Carlisle came under pressure this week from the senior Conservative member of the Select Committee on Education to speed up the process. He had told the committee that he hoped to issue his reply to the committee's report on higher education, which included a recommendation to establish a national body, by the end of the month but still could not commit himself.

Mr Patrick Cormack (Con, Staffs/ South West) told him: "There is some disquiet that it is now 10 months since the first major report of this committee and normally we have a reply within a few months." He expressed the hope that there would be a full and positive reply.

Dr Ray Rickett, chairman of the Committee of Directors of Polytechnics, reaffirmed this week that polytechnic directors would only support a new national body if its composition was left entirely at the discretion of the Secretary of State.



Lecturers lobby MPs about APT recognition

Leaders of the college lecturers' union believe that several Conservative MPs will bring pressure on Education Secretary Mr Mark Carlisle to change his mind about the recognition of the Association of Polytechnic Teachers.

Around 1000 members of the National Association of Teachers in Further and Higher Education lobbied MPs outside the House of Commons to express their view that the extra seat on Burnham for APT would cause serious difficulties for collective bargaining.

General secretary Mr Peter Dawson was due to address the Conservative back bench MPs' education group to explain the arguments against APT recognition being put forward not only by the TUC-affiliated union but by local authority leaders.

Next year's Natfhe president, Mr Chris Minto (right) is pictured with last year's president Mr Jim Richardson and union general secretary Mr Peter Dawson (centre) at the lobby.

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John Herivel on Isaac Newton, 15

César Milstein: hybridoma pioneer, 8

Angry universities may abandon 'clearing'

by Ngalo Creguer

The University Grants Committee has told universities it wants large-scale rationalization, including withdrawals from some sites, some common entry in Wales and extensive collaboration between institutions.

Universities were still in a state of shock and anger after the announcement of the cuts last week and many will decide to withdraw from the "clearing" scheme and discontinue thousands of sixth-formers hoping for a place this year.

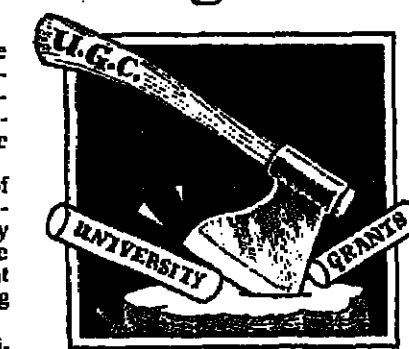
One of the worst hit universities, Aston, fears it may have to renege on conditional offers already made, and Salford and Bradford have declared their outright opposition to the UGC proposals. Sir Roy Marshall, vice-chancellor at Hull, has resigned from all his non-university public offices to concentrate on the university's resistance to the cuts.

Fierce opposition has also come from unions and lecturers suffered another blow this week from the Public Accounts Committee which hinted that tenure would have to go.

In the separate, private letters to the UGC, which went out last week, the UGC advised the University of Wales to concentrate on the provision of 11 subjects, encouraged the merger of University College and the Institute of Technology and advocated a swap of some subjects between Bangor and Aberystwyth.

It wants collaboration in social studies between Leeds and Bradford, in psychology and sociology between Newcastle and Durham, in sociology between Birmingham and Warwick, in archaeology between Durham and York, in architecture between Bristol and Bath, in social studies between Heriot-Watt and Edinburgh and in some arts subjects between Glasgow and Strathclyde.

Other suggestions include concentrating Heriot-Watt on its Riccarton campus, possibly a single campus at Brunel and better use of property at East Anglia. It says it will consider making money available for moving two schools, one to Oxford and one



to Kent, from Lancaster. Full details are on pages 4 and 5.

In a significant shift from its previous position the Public Accounts Committee, commenting on the effect of the proposed reductions in recurrent grant, said: "We trust that in considering how best to solve the present problems the UGC will bear in mind the desirability of introducing a greater measure of flexibility into future contractual arrangements for academic staff."

At Aston, which has had its grant cut by 30 per cent, a spokesman said "We firmly believe that if the recommendations are examined in public they will be found to be indefensible. However, if the cuts go through in their present form we can see no way we can honour every conditional offer. We would have to cut courses right away."

The majority of specific cuts the UGC recommends for Aston are in

contd on page 3

Graduate job chances cancelled 'Use long vacations for work'

by Paul Flather

This summer's graduates could face a job market shrunk by up to 10 per cent, according to early figures collected by the Standing Conference of Employers of Graduates.

A survey of the SCOEG's 400 member companies reveals that some 2,100 of the total 10,500 vacancies originally projected for this year's graduates have been cancelled in recent months. This is offset by an increase of 600 new vacancies.

In all this suggests a 10 per cent fall in the graduate job market compared with 1980, but as SCOEG points out, the recruitment season still has some months to run. It hopes more new vacancies will be notified.

Details of the cancellations are not

published but they are understood to be mainly in the public services sector, such as the gas and rail industries, in mechanical engineering, accountancy, which was heavily over-subscribed, banking and insurance.

The construction industry is keeping up its graduate intake and the chemicals sector and commercial firms are still recruiting. New employers are almost all commercial firms such as retail chains.

The survey also reveals that about 10 per cent, or 900 jobs among its 400 members, are still vacant, concentrated in sales, marketing and finance.

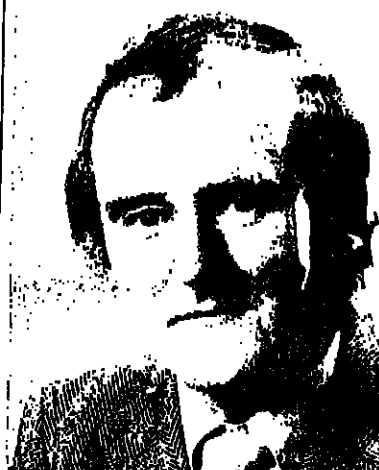
Mr Terry Dean of SCOEG, who compiled the survey, said graduates still looking for jobs should look for fresh vacancies because traditional avenues were drying up.

"We are still hopeful that the total

number of jobs for graduates will be the same as last year. The important thing is for school-leavers to continue to opt for higher education. It is quite wrong to think that there will not be jobs in three or four years time," he said.

Demand for production and electronics engineers to work with micro-processors was still very strong, and Mr Dean advised mechanical engineers, for example, to take jobs which were perhaps not obviously linked to their degree subjects.

On a brighter note SCOEG points out that this year at least 2,000 more graduates will find jobs compared with the recession of 1971-72. Graduate employment will be a key issue at the SCOEG annual conference at Exeter University later this month.



Dr J. E. Thomas: new chairman of SCUTREA
by Charlotte Barry

Academics in university extra-mural departments should be using their long vacations to do more adult education research, a member of Her Majesty's Inspectorate said last week.

Mr Konrad Elsdon told the Standing Conference on University Teaching and Research in the Education of Adults that they should not rely on external funding.

"Research is what all of you are paid for as part of your job and is one of the reasons that you have long vacations," he said.

Introducing a Department of Education and Science paper on national policy and research in adult and continuing education, Mr Elsdon conceded that resources were limited. Research funding in this area reflected the fact that adult education received less than one per cent of the total education budget.

He told the conference that researchers in adult education should be more willing to co-operate with each other and with other funding bodies like the foundations. They should also learn to disseminate their results more effectively and set aside specific research priorities, he said.

Mr Elsdon stressed: "The crucial thing is to achieve a better and more creative use of the resources which are there, and which at the moment are not used and often wasted in mere hack work."

Mrs Carol Cluntauway, an assistant secretary with the DES, said that the Government was more likely to be more sympathetic to research into continuing education as its importance gained ground.

Dr Elizabeth Bird, of Bristol University, gained widespread support from the floor when she pointed out that most extra-mural lecturers are too busy engaged in research during the summer vacation.

The new chairman of SCUTREA is Dr J. E. (Teddy) Thomas, deputy director of Nottingham University's adult education department. He succeeds Professor Gordon Roderick, of the University of Sheffield.

News in brief

Lindop retires

Sir Norman Lindop, former chairman of the Committee of Directors of Polytechnics, is to retire in April 1982, after 16 years.

Sir Norman, who will then be 71, has no plans to put his feet up. He will become principal of the School of Osteopathy in London, the present principal retiring next April.

He has suffered from mental and physical problems and first met with the school as a patient. Now Sir Norman will be back after the health of the school's 2 students, perhaps taking up the campaign for full mandatory grants.

Third world boycott

The National Coordinating Committee of Overseas Students, which represents overseas students' interests, last week launched a campaign urging the Third World to boycott British universities and NCCOS is angry at what it sees as a deliberate Government discrimination by charging overseas students higher fees and planning to charge for health care. They have written to Third World prime ministers and presidents calling for a port.

Closed shop code

The Institution of Mechanical Engineers has told the Government's proposed trade union legislation should protect members of their professional code of ethics above a union closed shop system.

Members who choose their professional code of conduct first should be safeguarded if they lose the 74,000 strong institution.

Money spinner

Staff at Edinburgh University personally received £39,412 in departments, a further £85,000 through the marketing of books and software by the university's Centre for Industrial Consultancy and Liaison.

£2m Hastings deal

The first phase of £2m building programme was officially opened this week at Hastings College of Further Education. The new buildings will house the business studies department, library, closed circuit television and social facilities.

Academy awards

The British Academy has announced the following medals and prizes: 1981: Burkitt medal for bibliography - Professor George Cairns; Oxford; Derek Allen prize for Jean-Baptiste Colbert de numismatics; Sir Israel Gollancz prize - Mr Alistair Alton; Turgot medal for classical studies - Professor Arnold Montagu; University College, London; Mary Crawshaw prize - Dr Peter Peters of Loughborough University (English literature); Serena medal for literature studies - Professor Giulio Einaudi, Turin.

In good company

A teaching company which will employ postgraduate students to carry out industrial research is to be set up jointly by Warwick University and Cosworth Research and Development Ltd. It will be directed by Professor S. K. Bhatnagar, of the university's manufacturing systems engineering department, and will carry out research into application of new foundry technology, involving light aluminium alloy casting, in the car, aircraft and general engineering industries.

NUU must lower status, says Chilver

by Paul McGill

The New University of Ulster should be effectively downgraded as the only alternative to complete closure, the Chilver committee, which is reviewing higher education in Northern Ireland, has decided. Continuation of the status quo would be indefensible, its members believe.

The committee favours a sketchy outline under which the university will lose much of its degree-level work and concentrate on new areas like foundation studies for mature students in-service and post-experience courses, Ulster studies and possibly European studies and music.

The outline, which will be expanded to form a chapter in the group's final report later this year, also suggests that NUU should continue with the areas of work it has developed successfully and cater for local needs such as vocational groups, mature students and services to industry and commerce.

According to a document leaked this week four problems have been identified - the reluctance of outside students to go to Northern Ireland, the large annual outflow of students from Northern Ireland, the absence of certain courses at NUU and the lack of credibility as "a university in the traditional sense".

The outline stresses that the changes proposed are in no sense a soft option.

The arguments supporting closure are NUU's inability to attract students, the forthcoming decline in the number of school-leavers, the need to concentrate university resources in fewer strong institutions at a time of spending cutbacks and "the absence of a strong or distinctive contribution by NUU to Northern Irish life".

On the other hand, the committee wants to avoid the concentration of resources in the Belfast area, the waste of the estimated £30m that has been invested in the Coleraine campus or the destruction of existing strong academic areas at NUU. These include social studies, micro-electronics and nursing studies.

It argues that the university is unlikely to become a strong, cost-effective institution if it continues as a centre for traditional degree work and that it must look increasingly beyond traditional university fields of work. A combination of existing work in successful academic areas and pioneering work in others could mean a college of around 1,100 to 1,600 students. The committee thinks the remaining plant might be used for other purposes such as a business school, a public service training centre or an Open University study centre.

Ten co-options on London senate

A much more abrasive University of London senate is to be involved in crucial decision-making in the next academic year.

For the first time there will be 10 co-opted representatives of the university's rank and file teaching staff on the senate when it meets in October. With the 40 directly elected representatives of the entire teaching staff and a number of heads of departments, the Association of University Teachers now has almost 45 per cent of the 120 seats on the new senate.

AUT leaders were cautious about the use of the word "sate" but it was clear that concerted efforts were made to ensure the co-option of certain members of staff below the rank of professor and reader.

Some of the smaller and most vulnerable colleges have also been given a voice for the first time in a new look senate which also gives students 12 seats.

College 'targets' split study group

by Paul Flather

Proposals to set "targets" for student numbers at colleges and polytechnics similar to those being set for universities look certain to cause deep divisions among members of a study group investigating a new system for funding public sector institutions.

The proposals are sketched out in a draft report drawn up by the Department of Education and Science for financing colleges and polytechnics in 1982-83, which will form the basis of the final report eventually agreed by the study group chaired by Mr Stephen Jones.

Last week committee members worked their way through more than half of the 21-paragraph draft, which is based on the principle that funding should be linked to student staff ratios inside colleges and polytechnics, with topping up for high-cost institutions.

But three major stumbling blocks remain to be tackled: should the

report include some notion of student number targets, should polytechnics and colleges be funded under the same unit-cost system, and what scheme should be adopted to manage the problems of high-cost institutions.

Both the National Association of Teachers in Further and Higher Education and the local authority representatives are bound to oppose strongly any notion of student numbers on the grounds that it is strictly beyond the remit of the study group. This view is likely to be shared by the colleges and polytechnics.

Much of the study group's work is overshadowed by discussions running in tandem over Government plans for a new national body to oversee the running of public sector higher education. The prevailing view is that targets should be the business of the new body, when it is set up.

The dispute over proposals to set up separate funding systems for colleges and polytechnics has still not

been resolved. Committee members appear to accept that widely differing levels of advanced and non-advanced work in the institutions make it difficult to plump for one rigid system.

Evidence suggests for example that colleges with more than 50 per cent AFE work are more expensive and would be penalised under the new system; colleges with less than 50 per cent AFE work are cheaper and would benefit. But this is not necessarily the desired result.

Both Dr Ray Rickett, chairman of the Committee of Directions of Polytechnics, and Mr Neil Merritt, chairman of the college principals' group, the Standing Conference, oppose the separate systems proposals, and have made clear they will refuse to sign any report which would "penalise efficiency among their members".

The committee has also not agreed on any system of topping up for high cost institutions which would be fit by any new unit cost system.

tension to Glasgow Royal Infirmary, which Dr Alwyn Williams, the principal, said could run into hundreds of thousands of pounds.

"We are faced with curious situation where to open and maintain phase one of the Royal Infirmary we may have to close down medical units and non-clinical subjects elsewhere," he said.

Both Glasgow and Edinburgh say they will try to honour all offers of places made to applicants for next session.

In Parliament the Opposition was quick to point out that the impact of the recommendations on the technological universities seemed to run counter to the Government's policies.

A motion tabled by the Shadow Cabinet being debated this week, "strongly condemned" the cuts in higher education resources. It attacked the Government's overspend on student fees policy, and accused ministers of abandoning the Robbins principle by deliberating axing 20,000 student places.

Special concern was expressed at the effect of cuts on institutions "which have made particular efforts to provide for the technological and scientific needs of the nation by their teaching and research".

Conservative MPs have privately admitted anxieties over the apparent contradiction between Government pronouncements on the importance of science and technology and the

recommendations in the UGC's letters. But with a full-scale backbench revolt unlikely in the face of a two-line whip, ministers were confident their country motion welcoming the UGC's recommendations for the "rationalization of the university system to ensure a balanced provision" would be passed by the Commons.

The Association of University Teachers is holding an emergency executive meeting today and there will be a special council in October.

Its strategy is to try to persuade the threatened five universities internally to reject the UGC selectivity. To finance any cash shortfalls this year it wants universities to use money for non-staff expenditure and the £20 million set aside by the UGC.

Leaders of all campus unions, including the teaching staff and students are likely to meet to seek a united strategy within the next 14 days.

The non-teaching unions reacted with anger not only to the UGC's proposals but to the way they had been excluded from consultations over their members' futures.

Mr Rodney Bickerstaffe, a senior official of the National Union of Public Employees and secretary to the trade union side of the ancillary workers' national pay machinery, attacked the "lickspittle" UGC for acting as the agent of the Government.

Full details, pages 4-5

OU ready to admit 18-year-olds

by Charlotte Barry

The Open University should lower its age of entry from 21 to 18, according to a report by its admissions committee.

Other changes recommended include guaranteed entry for unsuccessful applicants for the following year, an end to the quota for those already with a degree and setting aside seven per cent of each year's intake for group applications.

The age recommendation comes only a year after the publication of an OU report which showed in an experiment that students under 21 did less well than students at traditional universities and older OU students.

A university spokesman said this week that the OU was not expecting an influx of applications from young people. "The idea is to cater for the few 18-year-olds who are prevented from going elsewhere to university by personal circumstances," he said.

The OU senate voted unanimously last week to remain directly funded by the Department of Education and Science, rather than seeking to transfer financial control to the University Grants Committee.

Its recommendation is expected to be endorsed at a meeting of the university council on July 30. Proposals to change the OU's funding arrangements have been discussed ever since it was founded in 1969. But it was not until two years ago that the university formally requested the UGC to consider a takeover.

The UGC working party report, which was completed last year, concluded that major technical obstacles would have to be overcome before transfer was possible. Problems centred round the OU's regional organisation and its distance teaching methods.

At last week's senate meeting OU staff voiced three main reasons for staying with the DES. It was agreed that the OU would not gain positive advantage or enhanced status from coming under the UGC now its credibility was recognised by the traditional university sector.

It was also believed that the problem of co-ordinating the OU's financial needs with traditional universities would be too great and that the OU's growing continuing education section would have more freedom to expand under the DES.

SSRC reform goes ahead

Radical reform of the Social Science Research Council's subject committee structure is expected to be confirmed next week in spite of vociferous opposition.

The Council's decision will come after months of debate about proposals to abolish or merge at least half the committees.

It is understood that next Friday's meeting will agree to set up six new committees, each covering a broad area of study. These would be economic, social, education, management, political and environmental.

This so-called radical option, which would replace the 15 existing committees, was one of three put forward earlier this year by SSRC chairman Mr Michael Posner.

The other proposals included a modified structure involving abolition and amalgamation of smaller committees, and administrative groups each containing two committees.

The reforms have been vigorously opposed by senior academics, particularly chairman and members of the smaller committees, such as area studies, statistics, social anthropology, social and economic history and linguistics.

6 per cent for Scottish lecturers

Scottish College of Education lecturers have been awarded a six per cent salary increase, in line with the arbitrators' recommendation that Government guidelines on pay should not be breached.

Handicapped ask for a chance

Education, training and employment opportunities for handicapped young people would improve if their potential was fully realised, says a report published this week.

The consultative document from the National Bureau of Handicapped Students says that it should be regarded as normal for all young people, regardless of handicap, to go through the same process of assessment and guidance.

The document calls for simplifica-

tion of the present "confusing" pattern of provision and funding through central and local government. It says there should be more simple and effective information services to help those who need to use the services of the many agencies involved.

Further Education, Training and employment opportunities for handicapped people, is available from the BHS, 40 Brunswick Square, London WC1N 1AZ.

Natfhe seeks talks with Carlisle on compensation

by David Jobbins

The Government intends to deny redundant teacher education lecturers the compensation given during the aftermath of the major run-down of the mid-1970s, union officials fear.

The National Association of Teachers in Further and Higher Education is to seek talks with Mark Carlisle, the Education Secretary, to clarify the issue. But its officials came away from a meeting with civil servants convinced that the Government was tightening up on its declared intention that no more redundant staff would benefit under the "Crombie Code".

The new regulations being drafted to replace those under which Crombie was made payable in 1975 preclude any more payments, they say. It had been anticipated that the effect of the announcement to the TUC was that no lecturers losing their jobs in any new reorganization, for example of the polytechnics, would qualify.

But officials believe that the 1981 draft regulations mean that teacher education staff now affected by a previous directive from the Secretary of State would be deemed as well.

One official said: "You could have one college where people are still losing their jobs as a result of an earlier directive by the Secretary of State getting Crombie, and another where anyone losing a job as a result of a new directive will not."

"There would inevitably be discrimination between those affected by a 1978 directive, who would receive compensation, and those who are affected by any directive in 1982, who will not."

If they meet Mr Carlisle union leaders are to argue strongly that any new teacher education redundancies are part of a continuing process and should not be excluded from Crombie compensation.

MP backs students' campaign

The Conservative MP whose constituency includes Harrogate College of Further Education has given his support to a student campaign to remove Mr Andrew Brons, chairman of the National Front, from his job at the college.

Mr Robert Banks (Con., Harrogate) said that Mr Brons' activities in the extreme right-wing organization put a question mark over his position as a lecturer in government and law.

He said that Mr Brons' position had changed since he was appointed 11 years ago because he was now a leading figure in the Front. "I would not like my children taught by a communist or by a member of the National Front," he said.

Mr Banks said he was particularly concerned about Mr Brons' position in lecturing students since he had

written an article in a National Front magazine about the need to make the movement a cult among white youth which could not be challenged by "the state nor by Marxist or black mobs".

Vice principal of the college Mr Lewis Burgess, twice a Parliamentary candidate for the Labour Party, said that while he and the college principal, Mr Peter Drake, saw the National Front as an anathema, he disagreed with Mr Banks' stance.

"I would draw his attention to the statement of the Politics Association which says it is possible to teach government without biasing it to any particular political view," he said.

The college administration maintains that Mr Brons has never let his views interfere with his ability to do his job properly and that it would be illegal to sack him.

NATIONAL UNIVERSITY OF SINGAPORE

TEACHING APPOINTMENTS

Applications are invited for teaching appointments in the following Departments:

DEPARTMENT OF ENGLISH LANGUAGE AND LITERATURE

Literature

Applicants must possess a Ph.D. degree and should be specialists in one of the following fields: Modern English and American Poetry; Victorian Literature; Critical Theory; Sociology of Literature.

Language

All applicants must have post-graduate qualifications in English linguistics, with teaching and research experience in one of the following areas: the language of literature; text linguistics and the analysis of spoken interaction; educational features affecting language development; and/or psycholinguistics generally; research methodology; gathering of linguistic data on the local speech community (fieldwork combined with teaching duties).

The Department wishes to strengthen its teaching and research in the main areas of English linguistics. Applicants who have not specialised in any of the above areas will also be considered.

DEPARTMENT OF HISTORY

Preference will be given to candidates whose publication, research and teaching areas are in 19th and 20th Century East Asian History, 20th Century Middle Eastern History, History of Communism, History of the Soviet Union, especially its role in global power status, and Chinese relations with Southeast Asia.

Candidates should preferably be able to handle sources in Russian, Chinese or both these languages. Candidates who know a Southeast Asian language will have an advantage in the case of those interested in China's relations in Southeast Asia.

Gross annual emoluments range as follows:

Lecturer	\$422,570 - 44,810
Senior Lecturer	\$438,820 - 67,200
Associate Professor	\$455,410 - 78,020
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The point of entry depends on the candidate's qualifications, experience and the level of appointment offered.

For staff appointed on normal contract, emplacement on the permanent establishment may be considered after the initial 3-year contract. Leave and medical benefits are provided.

Under the University's Academic Staff Provident Fund Scheme, the staff member contributes at the present rate of 18% of his salary subject to a maximum of \$640/- per month, and the University contributes 20% of his monthly salary. The sum standing to the staff member's credit in the Fund (including the University's contribution) is tax-exempt and may be withdrawn when he leaves Singapore/Malaysia permanently.

Application forms and further details may be obtained either from:

(1) Mr Roland Sharma,
Director, NUS Overseas Office,
6 Chisham Street, London SW1, U.K.,
Tel: (01) 236-4562

or (2) The Recruitment Unit,
National University of Singapore,
Kent Ridge, Singapore 0511.

All applications should be submitted to the Recruitment Unit.

WASHINGTON

NEW YORK

Officials at City College who devised plans for the NW Centre for Worker Education consider the venture no joke. They have tried to build assurances of rigour into the project. But the reservations express-

Student financial aid was, however, very definitely part of the reconciliation bill. As a result, guaranteed plans, which have been available to all students since 1978, will again be subject to a means test. Loans will be restricted to the amount that students need to cover educational

by the reconciliation bill, such as aid to medical schools and institutions training other health professions, and the national endowments for the arts and the humanities. The House capped the combined budgets of the two endowments at \$225m a year until 1984; their appropriation for 1981

Harvard: a \$6m grant

However Ronald Haven, the director of research policy, General, told the sub-committee on the contrary, the company's public service by supporting a number of American researchers and paying for research that was published openly in the scientific literature. A few days later, Dr. Lumont was back in Washington to assure an NIH committee that Hoechst dealt did not endanger freedom of basic research at that time.

MOSCOW
Prize of M...

HE WAS INTERVIEWED LAST NOVEMBER

from Craig Charney

The are also confined to their home towns - in the case of the

Sri Lanka short of

Security police also released detained BSS chairman David Johnstone on July 1 after holding him for two weeks. Unlike his two colleagues, he was not served with a banning order.

All the Soviet contributions - presented in English - were purely theoretical as no scientist had been able to do any laboratory work since losing his job. "Our maximum facility is the pocket calculator," Mr. Brailovsky said last year.

The Soviet Academy of Scientists, though a relatively liberal institution in Soviet terms - Dr Sakharov is still officially a member - values its contacts with Western scientists, but is not able to influence the decisions of the KGB or political authorities on the treatment of dissidents and would-be emigrants.

However a parliamentary bill authorizing the increases was rejected by the opposition Christian Democrats who are demanding fundamental changes in the grants system.

Figures for 1979 show that nearly 30 per cent of students were being supported entirely by their parents, while only 14 per cent were completely dependent on grants. More than 12 per cent relied on help from parents and from the state, and a similar proportion on a combination of earnings from part-time work and a contribution from parents.

from Geoff Maslen

According to Tertiary Education Commission figures more than 45,000 students in colleges and universities are studying for postgraduate qualifications of some kind. Many of these are part-time students but Mr Fife said they would pay fees on a pro rata basis.

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Antibody revolution takes off

Dr César Milstein tells Clive Cookson why he shared his prizewinning research into hybridoma technology with the world



Nobel Prize committees are sometimes accused of capriciousness, but they have recognized almost all the really significant scientific discoveries of the twentieth century (though it often takes a few years for the work's importance to sink in). So it is fairly safe to predict that, in due course, César Milstein will become the fifth Nobel laureate from the Medical Research Council Laboratory of molecular biology in Cambridge.

Dr Milstein is responsible for the development of hybridoma technology. It could rival gene splicing, the other major discovery of the 1970s, in long-term medical and commercial potential and even in fundamental scientific significance.

Yet Dr Milstein and the hybridoma technique he discovered in 1975 are not nearly so well known as recombinant DNA technology, the basis of genetic manipulation, which was invented a couple of years earlier by Stanley Cohen of Stanford University and Herbert Boyer of the University of California at San Francisco.

The two American scientists and their institutions stand to reap huge financial as well as professional rewards from recombinant DNA; Stanford and the University of California have patented the basic processes of gene-splicing and cloning, and Dr Boyer holds a personal stake in Genentech, the firm he helped found to commercialize genetic engineering, that is worth tens of millions of dollars. But Dr Milstein and the MRC did not think of patenting hybridoma technology, and the 70 or so companies — mostly American — that are already racing to exploit its commercial potential will not owe them a penny in royalties.

Therefore professional recognition will have to be Dr Milstein's main reward, apart of course from personal satisfaction. And the modest Argentinian-born immunologist is now beginning to pick up major scientific honours for his discovery, which showed scientists how to produce large quantities of pure "monoclonal" antibodies.

Not that these awards are entirely without monetary value. The 1981 Sloan prize, which the General Motors Cancer Research Foundation presented to Dr Milstein in Washington last month, carried \$100,000. When a journalist asked what he was going to do with the money, he replied reproachfully: "I haven't thought about it." I suspect he was thinking "what a crass question"; but Dr Milstein is too courteous to voice such a thought.

What Dr Milstein achieved in 1975 with his Swiss research associate Georges Köhler was the fusion of an antibody-producing cell (from the spleen of a mouse) with a self-replicating mouse cancer cell. The resulting hybrid cell or "hybridoma" makes a single antibody, like its parent spleen cell, and it has the virtual immortality of a cancer cell, growing and dividing indefinitely.

Once a scientist has picked the clone of hybrid cells producing the antibody he wants, he can grow it on a scale sufficient to produce large quantities of this "monoclonal" antibody. It is a pure compound, designed to seek out and destroy one specific antigen (which might be almost any chemical that the body regards as a foreign substance). In contrast, the antibodies which the

immune system generates naturally to defend itself against invasion by germs and poisons are a mixture, and it is impossible to separate out more than the most minute amounts of a single antibody by traditional methods.

Monoclonal antibodies are revolutionizing immunology and the other medical and scientific fields that use immunology, because they are an incredibly precise weapon for searching out specific substances in the body, be they viruses, bacteria, toxins or cancer cells. In the short term, their greatest potential lies in diagnosing disease; for example, an antibody that latches on to leukemia cells can be mixed with a patient's blood and, if it reacts, the doctor will know that cancer is present. In the long run, monoclonal antibodies promise actually to cure disease; they could for instance deliver anti-cancer drugs straight to tumour cells without touching healthy tissues.

Dr Milstein is clearly excited by the worldwide effort to commercialize his discovery. He believes that scientists like himself who are engaged primarily in fundamental research should not shut themselves off from the practical application of their work; "it would be inhuman if they were not concerned", he says.

At the same time he is grateful not to be involved too closely in all the fuss. "Yes, I could have left the MRC and had a company of my own, but that would have been idiotic. My interest is in research."

Americans frequently ask whether Dr Milstein regrets the failure to patent hybridoma technology. Such questions naturally irritate him. "One thing I couldn't get across to them is that I'm an employee of the MRC and had a company of my own, but that would have been idiotic. My interest is in research."

The issue seems to have been troubling him intellectually. "When I say the discovery doesn't belong to me, that would be true even if I had not been an MRC employee. I don't think scientific discovery is the property of anyone," he said.

Any advance in research, however dramatic, inevitably depends on the work of countless previous scientists, explains Dr Milstein. "So it doesn't belong to the MRC or even basic science; it belongs to society."

Nonetheless, he cannot have been pleased last year when the White Institute of Philadelphia obtained American patents for two very broad applications of hybridoma technology: the raising of antibodies against viruses and cancer cells. Those patents must not turn out to be much use in practice; if enforced, they are bound to be challenged in court by other hybridoma users. But they show how old-fashioned — or naive — was the scientific generosity with which Dr Milstein handed out samples of his mouse cancer cells to colleagues from around the world who wanted to make hybridomas from them.

Most of the commercial research and development of hybridomas is taking place in the United States, where new companies are estimated to be joining in at a rate approaching one a week. Some are giant corporations, but about half the firms involved in monoclonal antibodies are small businesses devoting themselves exclusively to the field.

We haven't left all the action to the Americans, however. The hopes of Celtech, the new British biotechnology venture, rest on monoclonal antibodies. Celtech, which was created with the help of the National Enterprise Board, plans to commercialize an extremely promising discovery made recently by Derek Burke of the University of Warwick and David Secher of the MRC Laboratory of molecular biology (who is a former research student of Dr Milstein).

Secher and Burke developed monoclonal antibodies to human interferon, the glamorous but mysterious protein with which the body fights viruses and, perhaps, cancer. They hope to use large quantities of the antibodies to trap interferon produced by genetically engineered bacteria; the compound, which some believe will be a wonder drug of the future, is extremely difficult to purify by conventional means.

"It's important that the public and the granting agencies — without discouraging scientists from getting involved in the practical problems — should be aware that it is not in their long term interests for basic researchers to abandon basic research too much," Dr Milstein says. "Governments should not forget that the basic research of today is the capital of the future."

There is little danger that Dr Milstein will be lured away from basic research. Nor that another research institution will tempt him to leave the MRC laboratory where he has worked since leaving Argentina's Instituto Nacional de Microbiología in 1963.

But he plans to devote most of his scientific energy in the years ahead to the fundamental question that has preoccupied him for the past two decades: how can the body's immune system produce different antibodies to fit all the foreign substances it might encounter? He says: "The antibody system can recognize almost any chemical structure you can think of. There are very few chemicals which the system will not recognize if you persuade it to do so. There are millions of chemical structures and it follows that there should be millions of antibody structures capable of recognizing them."

When Dr Milstein first entered the field, many immunologists believed that we were born with sufficient genetic information to make all the antibodies we might need during our lifetime. Since then, he and his colleagues in molecular biology labs around the world have shown that our germ cells cannot possibly code for millions of different antibody patterns.

"They are enormous changes, involving very large deletions of DNA," Dr Milstein says. As he points out, the fact that genetic rearrangements take place in the cells of the immune system "has very important implications because it goes against the generalized idea we had until recently that the DNA of all cells (within an individual) was essentially identical."

The excitement in Dr Milstein's voice as he speaks of the fundamental scientific problem of antibody diversity shows how firmly his heart lies on this side of basic rather than applied research.

Media critic gets down from the fence

David Walker talks to lecturer James Curran who is to edit the Labour Party's new periodical *New Socialist*

A 1977 Open University text reads: "The power of the media derives from the long-term influence on the power of ideas rather than from their short-term effects."

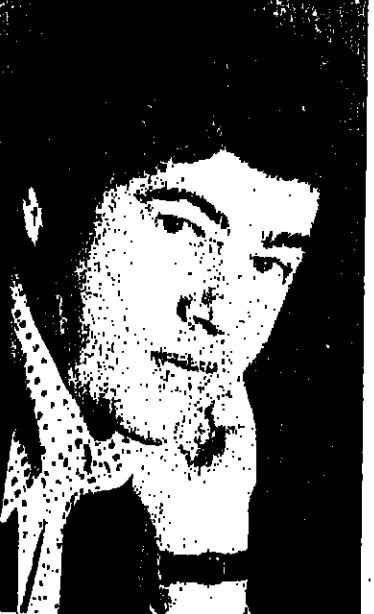
One of the authors of that course unit has recently been given the chance of putting the proposition to the test. He has charge of a potentially influential new periodical for a year, possibly longer. If it does not have palpable influence within a short space of time then the knives will be out.

The editor in question is Mr James Curran, former Open University researcher, now a polytechnic lecturer. He was recently appointed as part-time managing editor of a new Labour Party bi-monthly magazine "of political theory and debate of the Left".

According to a promotional trailer *New Socialist* will strengthen and renew democratic socialist ideas. Given the state of the Labour Party that's no easy job for Mr Curran.

He is probably not aided by giving a rather large hostage to fortune in the shape of his own previous writings. For academic to turn journalist is not uncommon but Mr Curran is a media researcher of critical bent whose books and articles — he has written about the history of the press in Britain, on newspaper advertising and campaigned against large scale ownership of the press — exude a suspicion of what journalists and editors are up to. He is close to the Glasgow University "bad news" school, whose attitude to the media is often frankly contemptuous.

Thus people who enjoy seeing biters bit may view Mr Curran's



attempts at editorship with interest. There will be plenty of journalists who if *New Socialist* sinks during some squally Labour dispute will show little sympathy.

So far both Mr Curran and the Labour Party's project are heading smoothly for a launch in September. He came to our interview with two briefcases stuffed with correspondence; his desk at the Labour headquarters in Walworth Road is piled high with the bric-a-brac of a shoestring magazine launch.

Mr Curran is 36, good-looking and Bennite. Unlike another academic turned Labour stalwart, Mr Stuart Holland MP, Mr Curran has none of that brutal arrogance characteristic of intellectual politicians. A political whizz-kid in the early 1970s when he fought three Parliamentary elections for Labour, Mr Curran has recently concentrated on his research and teaching at the Polytechnic of Central London where he is senior lecturer in mass communications. He has become a specialist adviser to the Labour party on media issues and serves as a director of the weekly *Tribune*. When Mr Curran and a

cast of thousands came to apply for the £1,000 a year editorship of *New Socialist* he was no stranger to pay headquarters.

All that may sound like what the advertisements for *New Socialist* say: "the obsession with personalities that in the media passes for debate". "Personality" in modern Labour code means Mr Wedgwood Benn, whom Mr Curran keeps a diplomatic silence. Yet Mr Wedgwood Benn's spirit informs the new periodical only in the sense that the Labour Party has finally stirred itself into launching a journal of ideas at a time when there is internal fence-mending in part to Mr Wedgwood Benn's manoeuvres. In terms of practical politics, the Labour party executive would only in its present leftist configuration have voted a (extremely) modest launch cash for a journal that, as Mr Curran says, carry contributions from a range of Marxists and Social Democrats, sundry other non dues people.

Mr Curran says the Labour party has sprouted research periodicals: discussion papers before but his will be completely new. "It won't be a journal that, as Mr Curran says, carry contributions from a range of Marxists and Social Democrats, sundry other non dues people."

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Paul Flather and John O'Leary continue our series on industry and education

The bandleader changes, but the tune remains the same

One of the areas where Government policy did not appear to change at all when a Conservative Government replaced a Labour one in 1979 was in the emphasis put on the importance of collaboration between industry and education for the benefit of Britain's ailing economy.

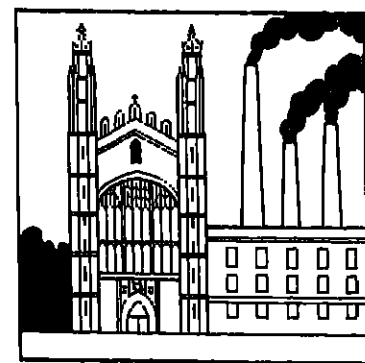
But again, while more good intentions pour out from the present Government ministers like water from a tap with a broken washer it is not so easy to find hard evidence of increasing collaboration between the two sectors.

In this second of our occasional series on industry and education we focus on the role of Government departments in promoting collaboration — "the honest broker" between industry and education.

There are four separate Whitehall units which appear to be active in this field. The Department of Industry has a separate unit which sees its

job as redressing the negative attitudes of young people towards industry. The Department of Employment is concerned foremost in the thicket of manpower planning. The Department of Education and Science is concerned primarily with overseeing the operation of the placements system in its various forms. Finally, the Manpower Services Commission is a separate agency specialising in training young people for jobs in industry.

Two general conclusions emerge from inquiries about the work of the four Government units. First, while there is no doubt the units keep in close touch with each other, there is perhaps a case for creating a single more powerful agency if Government ministers really attach the importance to industry and education links they say they do. It is not just



that one united agency would appear more effective. It would remove some of the artificial differences in approach in the different ministries to what is really a complicated issue, as well as improving coordination

and cooperation. Secondly, while all four units work strongly to adjust the education service to the needs of industry, there appears to be little work, even at the DoI, to "educate" industrialists in articulating their needs and understanding how the education system actually works. This is perhaps an equally vital task.

It is also apparent that the Government has not in fact been willing to spend a great deal of money in promoting the links it wants to encourage. Even £700,000 in the DoI is not much, although the programme recently unveiled to put a micro-computer in every secondary school by 1982 is an important step forward.

Ultimately however there is an important political dimension in the field which will have to be faced by both main political parties sooner or

later. At stake is just how far education should be put at the disposal of the needs of the economy, and at the expense of the needs of individual students. Should the service aim to give students a well rounded education, or begin to act more directly as a vehicle for producing skilled specialists on demand? That decision could determine the future shape of the country; it also presupposes an idea of what a future Britain should look like, both issues on which the parties have important differences.

Perhaps until such "political" issues are tackled head on civil servants will always find the going tough in a field littered with platitudes. At present they can do little more than use their limited resources as brokers between the vested interests of educationalists trying to put students into jobs, and industrialists trying to recruit for profitable enterprise.

High skills held in low regard

The brief of the Industry/Education Unit (IEU) based as it is in the Department of Trade and Industry is quite simple: to improve the industrial performance and international competitiveness of the nation's manufacturing economy. Within this the IEU sets itself two major tasks: to improve the attitudes of all young people, irrespective of their chosen career, towards manufacturing; and to encourage more young people to opt for manufacturing and take relevant courses in further and higher education institutions.

All this sounds so self-evidently worthwhile that it comes as something of a shock to discover these duties of the DoI were only formally confirmed as statutory powers last year when they were enshrined in the 1981 Industry Act, in the miscellaneous section of chapter six. This allows the Secretary of State to make grants or loans as considered appropriate to any body promoting links between industry and education, and to anyone in education encouraging young people to take up careers in industry.

In fact the roots of the DoI's involvement in this field can be traced back to the 1950s when the department first identified some of the manpower problems associated with the engineering industry. During the 1960s the DoI's research and development units continued the work, but it was in 1977 that things began to take off with the distribution of some 11,000 copies of a report on industry, education, and management, described by many at the time as a milestone. The report coincided with the introduction of the DoI's hugely successful Young Engineers for Britain competition. Open to budding inventors aged between 14 and 20, soon afterwards the IEU was formally created, and it now has a staff of 12 and an annual budget of £700,000.

The root of the problem seen from behind the desks of the IEU in Ashdown House in Victoria Street is

one of challenging attitudes. As Dr Eric Bates, the head of the unit who first came to the DoI to advise on planning agreements, has said publicly on many occasions, engineers and experts in technology are just not highly enough regarded in Britain. West Germany, Japan, and the United States, they are prestige posts.

To counter this the DoI mounts courses for school teachers, lecturers and students on the importance of industry. At its crudest level this can take the form of simple lessons in economics pointing how industry is vital in maintaining and improving standards of living.

Via a veritable hail storm of pamphlets, fact sheets, course programmes, films, and a quarterly magazine called *View*, the IEU sets out to show clearly that added value must be created before it can be distributed. It tries to counter the emphasis in most secondary schools and colleges and universities on "academic achievement" rather than "problem solving". A recent film for example is titled *Who Needs Industry?* Many schools are now appointing industry liaison officers, and running the IEU's "understanding industry" courses.

The IEU promotes specific local links with pump-priming grants from its £700,000 budget. So that the money is merely a catalyst, grants are restricted to three years, cover only a part of a project's total costs, and usually amounts to £2-£5,000 a project, although grants can be as high as £25,000. Last month the IEU allocated £6,000 to a science department of Glasgow University to run courses on material production processes in primary schools in the city, involving apprentices talking about their work.

Grants will also come in the form of the recently developed Higher Education and Industry Collaboration award, which will go to college or university science departments which have produced outstanding work, to the Industrial Training

Foundation, and the various exam bodies developing new syllabi and courses in industry and commerce. Last year the IEU also set aside £100,000 to develop its national network of Science and Technology Regional Organizations (SATROS). There are now 27 SATROS in existence, and the IEU promises to have 40 within the next 12 months. Each SATRO usually based in a higher education institution and run by a management committee involving the local education authority, careers advisors, schools, F and HE institutions, as well as local industry and commerce, aims to improve local industry and education collaboration.

The Sheffield SATRO, for example, based at the City Polytechnic, has just produced resource packs for studying the vast Selby coalfield project and making better use of industrial visits. Nearby, the West and North Yorkshire SATRO at Huddersfield Polytechnic has set out a project to teach science teachers about industry.

The IEU has two clear advantages over other Government agencies working in this field. First, it is based inside a rich department and quite simply has more money to spend. Secondly, as a broker between industry and education it is well placed to improve industry's contribution to the debate.

But while many companies are obviously vitally involved in the IEU's work, the traffic appears almost entirely one way, with industry passing advice to the education sector. The IEU's links with industry come through various committees and conferences, with larger companies such as ICI, Esso, and Unilever for example, producing its own film *The Foundations of Wealth*, for distribution to schools, and Esso and BP running elaborate schools link schemes. But perhaps there is room at the IEU for putting more pressure on industry to change some of its outdated attitudes about British education.

How the DES is finding its way round the market place

Few people inside the Department of Education and Science from ministers down to lower grade civil servants would question the vital importance of promoting links between education and industry.

The problem is that there is no obvious consensus on what form collaboration should take beyond making each sector aware of the other's interests.

Ultimately though the department exists to provide education of the highest standard to students at all levels: how far these standards and the range of courses should be adjusted and subjected to the needs of industry is not an easy issue for educationists.

In this sense the choices facing the DES's counterparts at the Department of Industry appear far more straightforward. The bulk of the DES efforts is naturally aimed at schools. However the officials working in promoting

links between industry and colleges, universities, and polytechnics face three major tasks.

First, the DES is inevitably drawn into the long running studies in manpower planning. For example, last year the department was prominently involved in the National Economic Development Organization report on the expected supply and demand of the workforce required by the new technologies, being introduced by industry. *Computer Manpower in the 1980s*. An official working party is currently scrutinizing the report which details factors that economic planners looking at new technology ought to consider.

Secondly, the DES is concerned with ensuring that ideas developed in the groves of academe are exploited commercially. This it can do through the various committees bringing industrialists and educationalists together, and by encouraging col-

leges and universities to set up their own teaching "companies" selling their knowledge as consultants to industry.

Thirdly, the DES is crucially involved in ensuring the smooth operation of the placements system, of block release courses, sandwich courses, and all the other courses used by industry to train their workforce. Here the department is working as a broker to see the types of courses demanded by industry are the ones put on by the various educational establishments. Most of the tinkering with syllabi is naturally done at the local level. But the overall decline in sandwich places currently being investigated by the Government would clearly fall under the aegis of the DES. Officials are also, for example, looking at courses usually taken up with placements from the construction industry, currently suffering a huge slump.

But even this illustrates the weak and fairly indirect role the DES has to play. Civil servants have to consider if these courses should be run down if the slump bottoms out and what to do with the expensive equipment and machinery usually linked with such courses.

The DES's work on courses is done mostly through the five industrial training boards. A related task, perhaps a fourth task, carried out with the aid of the influential advisory board for research councils, is to influence higher education entrance requirements so that A level and sixth form curricula are adjusted accordingly with a higher "commercial" profile.

No clear budget is earmarked for the DES's work on industry and higher and further education collaboration. Money is mainly channelled indirectly through other organizations, and of course more directly through

the University Grants Committee, the various research council allocations, and support for the teaching companies.

There is clearly much soul-searching at the DES on how to promote the links between the two sectors: more than any other Government agency the DES is caught on the horns of the dilemma between aiding Britain's ailing industry and aiming for a well rounded education for all students. A confidential internal study which is not going to be published reveals that in Japan industry and education appear to go their separate ways. Industry uses education as a form of sorting process to select recruits, then trains them to its precise needs. Perhaps the DES would happily settle for such a system. Perhaps such a system is the only one that works in the end.

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Patricia Santinelli reports on how academics are looking outside their ivory towers...

Our ancient seats of learning, it would appear, have a lesson to learn from the newer educational institutions, which, even if only accidentally, are taking a creative approach to the problems of their community, a recent report on study service in higher and further education in Britain - from which they are conspicuously absent - shows.

Contributions to the community are mainly achieved by incorporating as part of a students' academic course, projects whose secondary purpose is to benefit both groups and individuals. These range from developing a heart rate measurement system, representing tenants in courts or painting murals in depressed areas.

The absence of places like Oxford and Cambridge in these kind of projects is a major disappointment for Dr Alec Dickson, honorary director of Community Service Volunteers who took up a call from UNESCO and persuaded the Department of Education and Science to contribute £30,000.

"I believe this absence is an example of the narrow pursuit of knowledge for its own sake. It represents a fundamental flaw in the role that higher education has set itself, namely teaching and research. To that I would add service to the community," he says.

The Pole Vaulting doctors

Two weeks ago, 90 sober-suited, middle-aged doctors from a variety of countries met to celebrate the fortieth anniversary of a cooperative venture in higher education unprecedented in the history of universities. They were all graduates or staff of the Polish Medical School, founded in 1941. The school's students were Polish, the lectures were in Polish, the degree awarded was Polish - but the school itself was established within Edinburgh University.

The idea of the school came from Lieutenant-General Professor F. A. E. Crew, of Edinburgh's medical faculty and commanding officer of the military hospital at Edinburgh Castle.

The Polish forces were being reorganized in Scotland following the fall of France in 1940 and included a large number of medical students whose final exams had been disrupted by the outbreak of war. There were also medical professors and lecturers in the Polish camps.

As medical officers were urgently needed for the Polish forces, Professor Crew, backed by Edinburgh's principal Sir Thomas Holland and dean of medicine Sir Sydney Smith, suggested that the students be able to complete their studies in Scotland.

One doctor involved with the school from its inception was Wiktor Tomaszewski, now in general practice in Edinburgh, and organizer of the school's fortieth anniversary.

Dr Tomaszewski was accidentally one of the first Polish emigrants to Britain. A reader at Poznan University, he was returning to Poland from a conference in the United States and arrived in Scotland three

Olga Wojtas joins the fortieth birthday celebrations of the Polish Medical School... in Edinburgh!

days before the war began.

"People were getting out of Poland in any way they could. Most were making their way to France where the new Polish army and government were formed," he remembers.

Dr Tomaszewski joined the Polish army officers' medical training centre in France, and was one of the last people to be evacuated to Britain when the Germans broke through the Maginot line.

"We were in the Scottish camps when the news came that there would be a medical school. At first I didn't believe it, it seemed so fantastic. We dismissed it as one of those wild rumours."

However, the Polish government, based in London, enthusiastically accepted Edinburgh's offer and agreed to finance the school.

"It was a unique venture," says Dr Tomaszewski. "Never before had an academic school been founded on higher education regulations, with the right of giving its own diploma."

"Edinburgh offered all its facilities to us, all its laboratories, all its clinical wards. And the city gave us the Paderewski Hospital, within the Western General Hospital, a Polish hospital to help treat Polish civilians and soldiers, which gave special practical teaching."

Examinations were held in Polish or English depending on whether the professor was Polish or Scots. Most of the students had no knowledge of English before coming to Britain, and Dr Tomaszewski produced the first English-Polish medical dictionary. It was eventually published but to begin with was simply circulated on duplicated sheets.

The first graduations came within the year, and the students, all of whom, like the staff, attended classes in uniform, returned to their units.

But the school had a significance beyond creating more doctors for the

help the community in a much more organized and effective way.

Moreover, study service has its constraints. It must not encroach on professional, commercial or trade union preserves. It must not be cheap labour and properly directed it should do useful things which would otherwise be left undone. In this, Mr Whitley says, it has largely succeeded.

But above all Mr Whitley points out it poses far-reaching questions as to the future of higher and further education. Should its function be less exclusively intellectual in the sense of transmitting specialized knowledge or developing purely vocational skills? Should part of its function be to develop at the same time personal qualities and a broader humanity and a deeper understanding of life?

Perhaps the answers lie in one of the projects described by Mr Whitley "as the most single important one discovered in our enquiry."

It comes under the umbrella of social sciences, which for obvious reasons had the most numerous projects with no less than 54 departments reporting activities which could be termed as study service at all levels and with social work as the most instructive discipline.

It is Liverpool University's social work education division's three-year action project in Widnes tackling juvenile delinquency.

Prompted by the Cheshire social services department, the division set up a student unit on the spot which cooperated both with social services and the police. Students were able to test the 1969 Children and Young Persons Act through casework and group work with the families.

Students also assisted the police in a scheme to bring in local volunteers to counsel young offenders and played an important part in improving relations between police and social workers. Three films about the pro-

ject have now brought national recognition.

But along with the recognition comes a warning that community projects are a mixed blessing and a possible burden to the agency as well as a boon.

Despite the extensive practice of study service in his department, Professor R. A. Parker, professor of social administration at Bristol University, says: "Service to one section of the community could be actually disservice to another."

"The involvement of students in community politics might well generate adverse reactions in some quarters. Moreover, for every successful placement, another might be abusive and the cost to the community might outweigh the benefits."

But as Mr Whitley points out such objections are rare. He stresses for example that two projects in tutoring have been extremely beneficial to both the students and the schools involved.

Both projects use science undergraduates to tutor school children. One at Imperial College is a three year experiment to explore the potential of undergraduate tutoring in making secondary schools science classes more alive and effective.

At Edinburgh students are teaching biology in primary schools. Central to the success of the project has been the use of physical things such as stuffed animals and living organisms from the university stock. "In this way thousands of eyes have been opened and minds awakened," the report says.

Another contribution to study service comes from the arts departments.

The most prolific form in the visual arts was undoubtedly murals. These had been supplied by seven institutions, sometimes in public

places but most often for the benefit of particular groups.

"Ulster Polytechnic, for example, literally went to town with murals," Mr Whitley says. "A mural project by the school of fine art is associated with beauty the city's visible face."

It began some four years ago when the school suggested to the Northern Ireland department of the environment that it should make a contribution to the "spruce-up" campaign. The work undertaken with community groups so impressed the Ministry that he invited sequels in collaboration with the City Council and the Departments of Education and Environment.

In 1977 the City agreed such schemes - including "The Shredders" (pictured) - in cooperation with Belfast community groups at by January 1980, 38 murals were public display with a further 10 schemes in varying stages of completion. Now in spite of being optimistic the scheme is oversubscribed and cause it is so demanding it has been restricted to senior students.

One of the difficulties, Mr Whitley points out, is that the problem study service get lumped together with problems of educational and administration which would there even if there was no study service.

"A major difficulty is ensuring students gain as much knowledge experience per hour as they would in academic laboratories," Mr Whitley says.

Now Mr Whitley, who has been a keen promoter of study service, hopes to set up two pilot projects where as many students as possible would be enlisted from as many disciplines as possible to see what can be done in a specified period enhance the work of the local services departments and voluntary organizations.

land, France and Africa. When the Polish Medical School was founded, it had the second largest number of people to rebuild devastated Poland after the war.

In one of the bitterest periods of Polish history, post-war Poland was the scene of some of the worst Stalinist terror.

"The schools in Britain had been preparation for a future Poland, things didn't turn out as we expected," says Dr Tomaszewski. "People had fought for that kind of country."

Only a tiny fraction of the students returned to Poland; the rest who did kept quiet about their life in Edinburgh in case they were accused of being Western spies.

Says Dr Tomaszewski: "Don't come from all over the world to pay homage at this reunion. At the beginning of the war, without their diplomas they were lost, with no possibility of completing their studies. Edinburgh gave them their start in life."



Dr John Burnett (centre right), principal of Edinburgh University, welcomes Dr Wiktor Tomaszewski and other graduates of the Polish Medical School at the fortieth reunion.

On Her Majesty's Community Service

Events

EXHIBITIONS: continuing

Closing today, Crewe and Alsager College of Higher Education, Art Gallery, Jane Cross: recent work.

Closing tomorrow, Seven Dials Gallery, Earham St, London. Silversmith and jewellery work of Middlesex Polytechnic students.

Closing tomorrow, Lefevre Gallery, Bruton St, London. Important XIX and XX Century Works of Art.

Until July 19, Scottish National Portrait Gallery, Edinburgh. Eye to Eye: portraits from the gallery's collection presented in a novel way.

Until July 19, Museum of Modern Art, Oxford. Leon Kossoff: Paintings from a Decade 1970-1980.

Until July 19, DLI Museum and Arts Centre, Durham. The British Worker: photographs of working life 1839-1939. (Exhibition visits City Art Gallery, Worcester, August 1 to August 22).

Until July 26, ICA Gallery, The Mall, London. Future Communities: visions of the future on a human scale.

Until July 31, Arts Centre, Bristol. A Developing Process: photography exhibition.

Until August 3, Scottish National Gallery of Modern Art, Edinburgh. Gillies on Show at GMA: collection of the works of Sir William Gillies.

Until August 16, Whitechapel Gallery, London. Gilbert and George Photo-Pieces 1971-80 and Breaking Through: Television from East London.

Until October 4, Victoria and Albert Museum, London. Old and Modern Masters of Photography. The Chalon Brothers: landscape, the theatre and caricature in the work of John James Chalon (1778-1854) and Alfred Eduard Chalon (1781-1866), and The Art of the Book.

Until November 1, Bethnal Green Museum of Childhood, London. Cut Here: paper cut-out toys and models.

EXHIBITIONS: forthcoming

July 13 and 14, Department of Architecture, Plymouth Polytechnic. Review of year's work.

July 15 to July 30, Bedford Way Gallery, University of London Institute of Education. Exhibition of work from fine arts students of West Surrey College of Art, Farnham.

July 15 to August 3, Holworthy Gallery, Kings Road, London. Philip O'Reilly: paintings, drawings and prints.

July 17 to October 11, Hayward Gallery, London. Picasso's Picasso: and exhibition from the Musée Picasso, Paris.

July 27 and 28, Central School of Art and Design, Southampton Row, London. Theatrical designs submitted by bursary applicants to the Arts Council.

Friday July 10 and Saturday July 11, Clifton College, Bristol. The Poor Players: The Winter's Tale.

Saturday July 11, Arts Centre, University of Aston in Birmingham. New Plays in Rehearsal and Performance: culminating event of the Midlands New Writers Festival 1981.

Saturday July 11, Great Hall, Goldsmiths' College, London. Percy Corben Memorial Concert. Music by Gibbons and Byrd, Purcell, Schutz, Bach, S. S. Wesley, Vaughan Williams.

Monday July 13 to Saturday July 18, Tricycle Theatre, Kilburn High Road, London. Exit the Maids: a play with music.

Tuesday July 14, Axis Theatre, Crewe and Alsager College of Higher Education, Margaret Ozanne: piano recital.

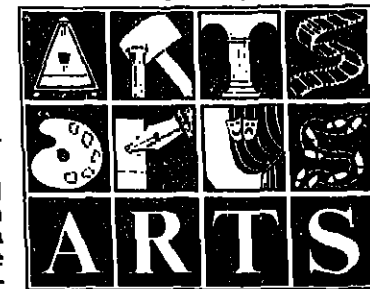
Wednesday July 15, Trent Park Music Centre, Middlesex Polytechnic. Young Jazz, director Phil Revens.

Monday July 20 to Saturday July 25, King Street Gallery, Bristol. Poor Players: The Aethel's Tragedy.

Wednesday July 22, Battle Memorial Hall, The Guildhall Quartet: Mozart, Beethoven, Brahms.

Thursday July 23, University Great Hall, University of Exeter. Devon County Youth Orchestra, conducted by John Georgiadis.

A novel approach to reading habits



Serious modern fiction may earn the attention of reviewers, but does it get readers? A survey conducted by Peter Mann drew some depressing conclusions. Here he explains why.

Most surveys of book-reading show less than half the adult population to be regular readers: most literary surveys show about two-thirds of all borrowing to be of fiction.

But the readers of serious literary fiction are, I reckon, probably no more than three or four per cent of the total adult population. Recently I wrote a report for the Arts Council literature panel based on over a year's researches into the modern literary novel and particularly the support it receives from public libraries, which is considerable.

But trying to find readers of serious novels is no easy task. I had, with help from a literary editor, a reviewer, an auctioneer and a bookseller, compiled a list of 20 titles published between mid-1978 and 1979 as a "test collection" for a national survey of public libraries and their holdings of fiction. I decided I would like to find some readers of these books, but the problem was where to find them.

A student surveying a local branch library under my direction had some difficulty in finding borrowers of serious modern fiction at all. Even in Sheffield Central Library fiction borrowed was usually of the "lighter" type. Trying to think where I might find a cosmopolitan group of reasonably educated, presumably literate, middle class people who might be "cultured" I thought of my university colleagues here at Sheffield University. So I listed my 20 titles and in the spring of 1980 asked one in five (242) of my married colleagues (lecturers, librarians and administrators)

and their wives to check if they had read any of them. The response rate was virtually two-thirds, giving me 140 husbands and 146 wives. For 90 per cent of respondents neither husband nor wife had read any of the twenty titles. From the whole 292 people 15 husbands and 15 wives had read any of the novels I listed, all of which I had checked were available in the local library. The "best" reader was one wife who had read seven of the books, but after her the next best were two wives and one husband who had each read three titles.

What were these books then? The most read was Fay Weldon's *Praxis* with 13 readers (seven men, six women). Second was Barbara Pym's *The Sweet Dove Died* with six readers and third place, with four readers each, was shared by A. S. Byatt's *The Virgin in the Garden*, Penelope Lively's collection of short stories *Nothing Missing but the Samovar*, and Raymond Williams' *The Fight for Manod*. A new local novelist, Don

little, I added five extra books which I thought might have had more readers. They were, with the reader response, Kingsley Amis' *Jake's Thing* (50), Iris Murdoch's Booker Prize winner *The Sea, The Sea* (29), Tom Sharpe's *The Wilt Alternative* (18), Doris Lessing's *Shikasta* (4) and Paul Theroux's *Picture Palace* (3). As can be seen, the inclusion of Amis and Murdoch certainly boosted the ratings, but even so, for an Amis novel about a university lecturer, there were only 31 husband readers from 146, giving a 21 per cent readership.

Drawing conclusions from this small survey is a difficult task, but I see no reason why the Sheffield staff should differ greatly from any other university staff (movement between universities being so random) and Sheffield City Libraries, as I know from research, provide an excellent lending service.

My conclusions, from the whole of the research, which included a national survey of public libraries, is that for the most part serious modern literary fiction, although constantly reviewed in magazines, newspapers, and on radio and television, and certainly supported by public library purchases, has a very limited readership. Arts Council subsidies to would-be authors and to publishers may increase the output of these novels; I have yet to see a suggestion anywhere which would increase their readership.

The author is a reader in sociology at Sheffield University.

Sillitoe and Sharpe for Essex Festival

Essex University has gone into the festival business. This year sees a week-long programme of poetry, prose, drama and music, with enough established artists to make it look as though Colchester has been hosting such an event for years.

Perhaps the biggest catches are in the prose section, where Alan Sillitoe, Tom Sharpe, Fay Weldon and Rose Tremain will be reading their own work. In addition to which, the playwright Edward Bond will take part in drama readings.

There are new musical settings of some Emily Dickinson poems, and a jazz sonata, commissioned by the festival, based on the work of Fay Weldon.

It is scheduled to run from October 5 to 10, at three venues in Colchester. More information can be obtained from Charlie Langdon-Mead (Colchester 861946) or Joseph Allard (862286).

It is 50 years since the old London County Council funded the first evening classes at Goldsmiths' College, as an adult literary institute. To mark this jubilee a book entitled *Fifty Years of Adult Studies* will go on sale in a limited edition of 1,000 copies, in September.

The book is also the fruit of the labours by a research group set up as an evening class seminar. It takes the story back to 1891, when the Goldsmiths' Company ran the college as a technical and recreational institute. There will be contributions from the warden, Richard Hoggart; Sir Ross Chesterman; Professor R. Pinker, as well as from staff and students past and present.

The price of the book is £2.50 (plus 30 pence postage and packing) from the college.

Goldsmiths is also planning a retrospective of a rather less contentious epoch. *Home Front* is the title of an exhibition running for the duration of October, dedicated to the subject of life in wartime London. The declared aim is "to bring back a few memories for some and open the eyes of others too young to remember".

It will be set in the atmosphere of an air-raid shelter, and will feature

HOME FRONT 1939-1945



such paraphernalia as gas masks and ration books, depressingly familiar items at the time but since then quickly relegated to dusty corners.

During the month there will be six talks and two film nights. Particularly interesting to those connected with the college will be local historian Barbara Ludlow's illustrated talk, "South East London at War" on October 7.

More details from Mr Vic Eyles, at the college's Audio Visual Education Centre.

An autumn term exhibition and series of lectures is planned by Brunel University to demonstrate the role of science and technology in the making of music.

The exhibition will run from November 16 to December 3; the lectures and seminars are free and open to the public. The director is Mrs Wyn Borger, from whom full details can be obtained (Uxbridge 37188m ext 53).

A women's theatre group from San Francisco is in residence next week at Kilburn's Tricycle Theatre, one of the few fringe companies to be pleasantly surprised in the last round of Arts Council grant allocations.

The group is called Lilith, and their play, *Exit the Maids*. Their style is described as "a distinctive brand of feminist humour and insight", and they enjoy considerable popularity on America's West Coast.

The play was apparently inspired by a meeting with a member of the Hotel and Restaurant Workers'

Union and her stories of life as a maid and organizer of working women. During the eight months spent researching and writing the play, it had an unexpected topicality thrust upon it when San Francisco hotel workers went on strike. The play runs at the Tricycle Theatre until July 18.

The Art's Council's highly praised touring exhibition, *The British Worker*, is at the DLI Museum and Arts Centre, Durham until July 19.

It features more than 300 photographs by 60 photographers; these form a portrait of working class life in Britain from 1839 to 1939. The photos were selected from collections and libraries throughout the country by Colin Osman, editor of *Creative Camera* magazine.

Subjects caught by the various lenses include tin mining in Cornwall at the end of the last century, brewing in Essex during the same period, and nail-making by women in the Black Country. The year 1839 is generally accepted as the date when photography's invasion, even though the long exposure times needed during the infancy of the art led to immobile poses, or the all-too-mobile presence of a "ghost".

It was often the charitable organizations such as Dr. Barnardo's or the Church Army who recorded the horrors of urban poverty. Some of the most telling photos in the exhibition come from Thomas Annan's survey of the Glasgow slums in 1861, and from James Clerk's disturbingly similar South Shields in the 1930s.

The Institute of Contemporary Arts exhibition, *Future Communities*, continues until July 26. It brings together the best of the ideas of the "architects, activists and eco-freaks" (The ICA's own description) who entered the 1980 Town and Country Planning Association's competition to design "Tomorrow's New Community". Most attractive for the lay visitor is a working model enabling the user to play the games the planners play.

On July 14, 16, 21 and 23 there are the last of the series of discussions designed to answer the question of how we can achieve change in our physical surroundings and the institutions which control our lives.

Seeing is not Believing, the exhibition at the National Gallery of Scotland - is about an aspect of painting most galleries prefer not to dwell upon: fakes, copies, alterations and "improvements".

A special bonus at this year's Edinburgh Festival Fringe - claimed to be the biggest arts festival in the world. Companies from Aberdeen, Durham, Edinburgh, Exeter, Glasgow, Heriot-Watt, Imperial College, King's College, University College, Newcastle, Sheffield, St Andrews, York, New Universities of Ulster, and London Universities, will take part, as well as five groups from both, Cambridge and Oxford universities.

The National Student Theatre Company will present six plays, including *Imagine*, by Stephen Jeffreys, based on scenes from John Lennon's life, and two successes from this year's student drama festival, *Cramp* and *A Portrait of Sarah Siddons*.

Overseas groups, which in past years have put on some of the most stylish and imaginative student productions, will be represented by University of Windsor and Saskatchewan players, as well as Princeton and Dublin university groups, the last of whom are to present five works, including a new adaptation of Frank O'Connor's classic work, *Guests of a Nation*.

A special bonus at this year's Edinburgh Festival will come from Fernier, the mineral water company, which is to offer a £1,000 touring award for the best revue at this year's fringe.

Alan Franks

The ill-faring State

Ramesh Mishra argues that the Welfare State has lost the legitimacy it enjoyed since the War. A question mark hangs over the social services and their future role in Western democracies

Every major crisis in society's institutions and practices calls into question our understanding of the social world. In the current crisis of the Welfare State - the system of mixed economy and social services seems no longer viable - it is the economist that has been in the firing line (the most pressing problems are economic in their manifestation).

But it has also become clear, to economists and non-economists alike, that the current problems besetting western industrial societies are not primarily "economic" and have no purely economic solution. Economic growth, inflation, productivity, public expenditure and the like are eminently "social" phenomena rooted in society's institutions and attitudes. Thus a major criticism levelled at Keynesianism (by economists above all) is that it took no account of extra-economic influences, for example those stemming from the competitive politics of democracy, in formulating its interventionist doctrines. Clearly then economic issues and their solutions cannot be considered in isolation from the social structure of capitalist democracies.

Moreover, economic difficulties have precipitated a general crisis of confidence in the Welfare State. The social services and their future role within western democracies is under a question mark: rising public expenditure is being blamed for a host of economic ills, the state is said to be suffering from an "overdose", the problems of financing the social services, maintaining control over public expenditure, ensuring efficiency in the operation of the services and generating social satisfaction through welfare policies - to name only the most viable problems - are proving intractable. The welfare state has lost the legitimacy it enjoyed since the last war.

These developments pose a challenge not only for economics but also for other social sciences - notably politics, sociology and social administration. And so far as the question of social welfare - the causes and consequences of growing social expenditure in all the rich nations - looms large in the current problems of the welfare state the discipline which is most relevant is social administration. It is devoted entirely to the study of government policies and practices concerning social welfare. It is also multidisciplinary in approach and far from being preoccupied with mere disciplinary "puzzles" it has aimed at producing practical knowledge about the welfare state. Moreover, unlike economics, politics, sociology and other disciplines which claim to be purely academic social administration has rejected the "value-free" stance and closely allied itself with the values underlying mixed economy and collectivism. Loss of confidence in the idea and institutions of welfare state should therefore be of major concern to social administration and we would expect the discipline to respond vigorously to the intellectual and philosophical challenges posed by these developments.

What we find however is an altogether muted response. For example, looking at recent literature of social administration - whether books or journal articles - one would hardly suspect that the welfare state was facing its most serious crisis of the post war years. And in so far as current difficulties have been recognized the mood has been one of resignation - pessimism about the prospects of welfare (Pinker) or an attitude of making the best of a bad situation (Townsend). More important, there is no attempt to engage the problems - whether positive or normative - at a fundamental level. Thus we find that the discipline which specializes on the Welfare State has little to offer by way of analysis and debate on major questions concerning the Welfare State. How can we explain this paradox and what are the implications for the future study of the Welfare State?

In the academic division of labour that emerged in post-war Britain the study of the Welfare State fell largely to the fledgling discipline of social administration. Sociology, anxious to develop into a science of society, steered clear of social reform and "doing good". The "golden age" of post-war sociology saw the emergence of "sociologies" of virtually everything under the sun except the sociology of the Welfare State. Sociology was content to leave welfare to social adminis-

ing the State and the distribution of power, the role of social consciousness in social change, the influence of "factors" in guiding public opinion along the right path, the compatibility of economic growth with increasing social expenditure, the essentially beneficial nature of ever increasing state welfare provision, to name only the more important ones - have never been scrutinized by its practitioners.

Indeed it is doubtful if this could be done within the framework of a discipline whose very identity is shaped by these assumptions. Yet the current crisis of the welfare state centres largely on the frailty of many of these assumptions. Secondly, the king of theories that have been developed, for example stigma (Pinker), issue selection (Hall, Lind and others), territorial justice (Davies), have to do with the process of policy-making and related concerns within the practice of welfare. They are concerned with micro-structural or operational analysis of policies and processes. Theories which seek to understand social welfare institutions as a part of the social structure of society have remained marginal to the concerns of social administration. This is not accidental. If social welfare is approached in an administrative-interventionist framework, that is as "policy analysis", then it is difficult to look at welfare, as it were, from "outside" - as an institutional complex interacting with the others and producing various unintended and unforeseen consequences. This last point is an important one. For much of the current debate is about unintended or unforeseen consequences of welfare.

The point is worth emphasizing because its significance has been overlooked in the technocratic approach to social reform typified by such authorities as the Webbs, Keynes and Beveridge. The assumption of rationality behind this social engineering approach ignores the fact that social institutions are not like pieces of machinery which once put in place would keep working in the way they are meant to. They are part of a dynamic system of human action and interaction which produces various "externalities". This rules out neat, technocratic, once and for all solutions to social problems and obliges the social scientist to study the ramifications of institutional reform. Yet the very essence of a "policy science" approach is to focus on intended consequences or objectives of social policy and the best means of attaining them. The study of unintended consequences (and causes) of social welfare seems to require a less technocratic and more sociological approach.

It is partly because a social structural approach of this kind has failed to develop that the problems posed by the current crisis have tended to "overshoot" the techniques and perspectives developed in the study of social welfare. Donohue has recently argued for making greater use of economics and politics in the analysis of social policy. This suggests a "political" approach, one which would link analysis more firmly with the two major institutional orders of the social structure. But much depends on the framework in which economics and politics are utilized. If that remains unchanged then new knowledge would not make much difference to the basic orientation of the discipline.

Be that as it may, the atheoretical, empiricist approach of social administration coupled with the absence of a sociological specialism focussed on the welfare state has left a vacuum in what might be called the Political Economy approach, i.e. looking at the economy in relation to its wider political and social context. Political economists (O'Connor, Gough, Buchanan, Brittan and others) have produced challenging analyses of the development and consequences of post-war welfare.

A distinctive and valuable feature of the liberal school is its analysis of the welfare state in terms of the unintended consequences of "rational" action by the various actors involved, for example, politicians, voters, professionals, bureaucrats. In many ways, the model of a "political market" offers a more meaningful and convincing explanation of rising social expenditure and government "overload" than for

example reified Marxist categories such as "needs of capital" or "class struggle". In any case a major weakness of the Marxist approach seems to be its ambivalence concerning the status of the political as an explanatory category. Since the state is seen as serving the needs of capitalism the contradiction between a capitalist market economy and a democratic polity (an important source of contemporary problems) does not find a proper niche in Marxist theory of the welfare state.

Whether we find the political economists' explanations (and underlying value preferences) convincing or otherwise is not the issue. The main point is that this particular approach has proved fruitful in offering plausible interpretations of the current situation. Now looking at this approach more closely we can see that it is really a form of sociology of the Welfare State albeit focused on the interaction between two principal sectors of society, viz. economics and politics. For it cannot be denied that interaction between the different institutional components of society and the unintended consequences of social action more generally are among the major concerns of sociology. But sociology, as we have seen, left the study of welfare to social administration and in so far as it did concern itself with the Welfare State this was largely in the context of functionalist models of society.

The emphasis has been on integration, harmony, the needs of industrialism, convergence and the like. The Welfare State has rarely been considered as a source of conflict and dysfunction. True, both T. H. Marshall and Titmuss - social scientists who crossed the boundary between sociology and social administration freely - were in different ways well aware of the conflict between welfare state and capitalism. But both tended to see the conflict largely in terms of values. The possibility of functional incompatibility arising between different institutional sectors, for example social services, market economy, democratic polity, was never seriously considered although Marshall referred to the value-conflict among these three.

I have argued that social administration lacks the disciplinary concern and resources necessary to confront the issues raised by the current difficulties of the Welfare State. Yet the importance of these issues can hardly be exaggerated. They need to be understood as best as the resources of the social sciences permit. Political economists have made a useful contribution to the analysis of the core problems and methods. More work of this kind is needed and would no doubt go on in the context of politics, economics and other disciplines. There is also a burgeoning philosophical literature - the best of which is typified by the work of Rawls and Nozick - relevant to welfare. This normative debate is beginning to trickle down to the students of welfare (Plant, Wole and others). Sociologists are also beginning to show more interest in the welfare state. Recent writings of Daniel Bell and Morris Janowitz, for example, hold the promise of what one hopes might be an awakening of sociological interest in welfare. For it is not only welfare that needs sociology. Contemporary problems of the Welfare State could be a major catalyst in social structure thinking.

For post-functional sociology has yet to fashion models and concepts of social structure adequate for understanding modern society. Thus far, the gap left by the collapse of functionalism has largely been filled by Marxism. Other contributions are obviously needed. So where does all this leave social administration itself? Undoubtedly, social administration itself will not be immune from these intellectual developments. And while it retains its essentially technicist-reformist character new departures - philosophy of welfare, sociology of welfare, political economy of welfare and the like - are the discipline. It is likely that in the coming years this fringe activity will become a central one in that the symbiosis between the "centre" and the periphery will be to the advantage of both.

The author is senior lecturer in sociology and social administration at Portsmouth Polytechnic.

Figures from the future

People vote most sincerely with their feet. This is why the meetings arranged by the Committee on Teaching Methods in the University of Leeds normally attract less than 15 per cent of the teaching staff. Everybody knows why this is so. Llanelli prop forward don't readily take advice from Italy lacrosse players on how to catch a ball. Electrical engineers are similarly reluctant to be told how to teach by people from the French department.

Only when 34 new members of staff failed to turn up in September 1980 for a free lunch to which they had accepted an invitation did I begin to wonder whether the fault might lie in my colleagues rather than myself. But the mood passed.

Only in the fortnight before May 11 did I start to change my mind. I naturally felt pleased with the title *Computers in the University - Aids or Foes?* I also thought the blurb was quite good. "Some know nothing about computers, others are afraid of them, and some might find them useful." I had written both myself. I did not expect even the phrase which trapped Malvolio to produce such results. Equally elegant admissions had evoked no responses in the past. But 209 colleagues said they were coming. I began to think we might on to something.

The professor of computing science shared my surprise. The innumerable introductory courses which he had been offering since 1965 had attracted even fewer previously uncommitted colleagues than my own less obvious useful efforts. We both learned the same two lessons. If you build a mousetrap the world will beat a path to your door. You have to put wine into new bottles if you want make a quick sale.

I hope my colleagues enjoyed as much as I did. It is splendidly summed up by the very last line. And the computer will do it for you. You know how to ask the right questions. Press the right keys and go. Bibliography is there. Use the key words and the computer will summarize what the articles say. You don't need to travel to Manchester or Oxford. The computer is linked to them for you. I finally knew what the natives in Rider Ingard felt when the white man made the sun go behind the moon.

Neither was I the only astonished worshipper. At least 180 colleagues came back to the conference after we. You have to have organized a seminar at a northern university to know that that means. The sessions after lunch with the computer as a teaching tool. One programme told medical students about an accident that had just taken place. It then suggested seven possible lines of action. The one chosen produced further symptoms. These then led to another multiple-choice question. The student decided to loosen emergency tourniquet. The computer told him that the patient had just died. How we all roared.

Most of us from the arts faculty were as timid Luddites. We needn't be worried. I shall still need to go to Paris. The French certainly won't have got abstracts of the obscure articles which need to read on to a computer comparable with anything in England. But I am going to try to write a programme of remedial French grammar for first year students.

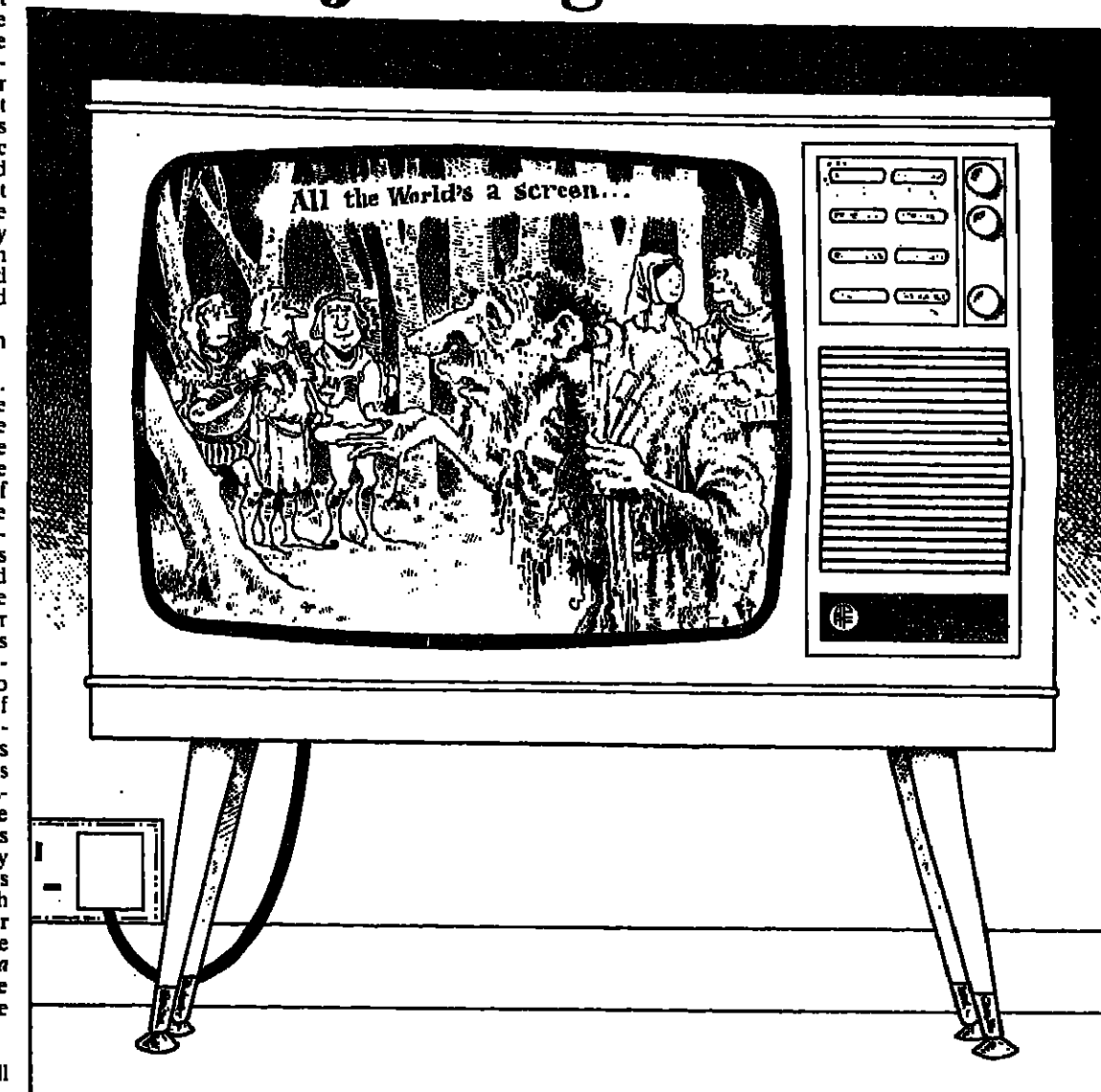
Now what can I put on that will attract more than 27 people next year? One colleague suggested a half day of visual aid. I must enrol the services of the professor of transport studies. Another wants to talk about small group teaching again. The group will be small all right. Someone else is interested in pastoral care. I must buy the theologians. We could in the language problems of first-year students. Although I have not found any final answers to my questions, I have at least twelve different directors struggling to deal with them.

The absence of scenery from the Elizabethan stage must have contributed significantly to the effect of Shakespeare's plays in performance. For one thing, it compelled the spectators to concentrate their minds on the characters and the relationships out of

Philip Thody

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Adjusting the set



John Wilders describes the difficulties and challenges of televising Shakespeare's plays.

but of the imaginary, fabricated worlds of romance and by placing *As You Like It* in a real forest we forced the realism of the location to conflict with the artificial conventions of the play. It became that much harder to believe in *Henry VIII*, a dramatisation of historical events, worked much better on location.

Another possible solution to the problem of setting was to build studio sets designed to appear fabricated. This was the decision made by Herbert Wise for his production of *Julius Caesar* and by Jack Gold for *The Merchant of Venice*. It is much more satisfactory because the deliberate artificiality of the scenery works in harmony with the conventions of the plays. Unfortunately it may create the impression that we have tried to build realistic sets but have failed for want of skill or money, an objection raised by the *Observer* critic who complained that *Romeo and Juliet* took place in 'Messina'.

There is, however, yet another answer to the problem and that is to make the productions look like paintings. The television screen resembles the stage in that it depicts characters who move and speak, but its two-dimensional surface, rectangular shape and surrounding frame also makes it look like a picture. This is the feature of the small screen which has been exploited by Jonathan Miller, whose version of *Antony and Cleopatra* was designed to recall the paintings of Veronese, and by Elijah Moshinsky whose *All's Well* contained visual quotations from Rembrandt and Vermeer. It is, I am sure, the most satisfactory answer the directors have yet found. It calls attention to the artifice of the plays and does justice to those tableaux which are as much a part of Shakespeare's dramatic language as is his dialogue. But can the appropriate style of painting be found to match every play? And how many viewers were aware of the pictorial allusions?

Another, quite different, kind of problem arises when a particular kind of writing is transferred to the small screen. Needless to say, there is no such thing as a Shakespearean style because he wrote in every kind of style, but some, such as the intimate, conversational prose of the tavern scenes in *Henry IV*, take more easily to television than others. The elaborately constructed verse spoken by Cardinal Wolsey in his speech of farewell in the third act of *Henry VIII*, with its prolonged and stylised articulation of feeling, its luxuriantly elaborated metaphors and repeated syntactical patterns could scarcely be more different from the chatter of Starkey and Hunch or the breathless ejaculations of the sports commentator with which television is normally associated:

Farewell, a long farewell, to all my greatness!
This is the state of man: today he puts forth
The tender leaves of hope; tomorrow blossoms
And bears his blushing honours thick upon him;
The third day comes a frost, a killing frost,
And when he thinks, good easy man, full surely
His greatness is a-ripening, nips his root,
And then he falls, as I do. I have ventur'd,
Like little wanton boys that swim on bladders,
This many summers in a sea of glory;
But far beyond my depth. My high-blown pride
At length broke under me, and now
I have left me,
Weary and old with service, to the mercy
Of a rude stream, that must for ever hide me.

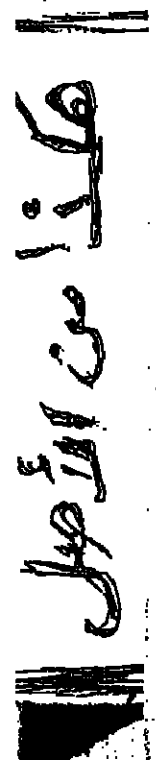
This is a public style, a statement about the nature of worldly power delivered by a man who has discovered its truth by experience and needs to pass it on to us for our enlightenment. It is the heightened expression of a state of mind which in the customary naturalistic mode of television would be conveyed by a single sentence, a sob or silent gesture. It is like an aria without music, designed to be sent flying through the air into an auditorium filled with attentive listeners. Yet for the television actor there is no auditorium, no crowd to excite with rhetoric, but simply cameras, a microphone, and, in the near distance, a group of technicians and the studio wall. Moreover, the viewer, seated in his armchair only a couple of yards

away, knows that the actor is not addressing him personally and that what he sees is the image of a man impersonating Wolsey, greatly reduced in size, filmed several months before and projected onto film surface. That is why the intimacies of politicians confided to us through the barrier of the screen always seem faked (as, indeed, they must be). I am concerned here not with the absence of audience contact which occurs when any stage play is transferred to the television, but with the loss of a public, formal effect peculiar to a certain kind of verse drama. It is not a serious problem if a character is addressing an audience within the play (as when Mark Antony addressed the Roman mob), but it becomes insuperable if he is speaking in soliloquy. Wolsey's speech of farewell is a soliloquy in the sense that he is alone, but in style it is quite different from Hamlet's "To be, or not to be," a loosely connected succession of thoughts on which the character ponders to himself. Because television places barriers between the actor and his audience, this oration must be spoken into a void and heard from a remote distance. Acted on television as I believe Shakespeare intended, the speech would appear inflated, unnatural and probably embarrassing. Acted in our production by Timothy West in a subdued, meditative, introspective way, it certainly did not embarrass but it violated what the style suggests were the dramatist's intentions. A choice had to be made between the artifice of Shakespeare's rhetoric and the realistic conventions of television. In this particular case, the choice was probably right, but the situation is one in which neither choice can be wholly right. What shall we do when we come to Lear's thunderings in the storm?

To attempt to televis Shakespeare is frequently to face problems for which there can be no satisfactory solutions. To recognize this is to discover in a new context the inescapably theatrical nature of his art. But I must not give the impression that the whole process consists of nothing but intractable problems and poor compromises.

Television can restore to Shakespeare's plays the unbroken flow and continuity they were certainly achieved in the renaissance theatre, the simple process of cutting, the director can shift from one scene to another even more swiftly than was possible in Shakespeare's time, when the actors had at least to walk between the stage doors and the acting area. For this reason we have tended to cut those bits of dialogue designed simply to cover entrances and exits. Television performances can also be taken at a more rapid pace than is possible even in the most intimate of modern theatres. In the theatre the actor must ensure that his words, gestures and the expression of his face are transmitted to many people, some placed at a considerable distance away, and he must therefore adopt a less than natural pace both of speaking and physical expression. But a television actor, placed only a yard or two away from every member of his audience, can speak at a conversational rate and by the merest twitch of an eyebrow convey feeling. Not only does this speed of performance give to the plays a tighter unity, but it probably restores to them the pace and rhythm they achieved when they were first produced. The Globe Theatre, polygonal in shape, built largely of wood, rubble and plaster, unencumbered by the sound-absorbing materials of carpeting and upholstery, was, I imagine, an acoustically lively place. The actor, in close proximity to his audience, could have rattled off his lines at a rate which made the "two hours' traffic of our stage" a fairly accurate description. Television can also do justice to the way in which the plays are constructed. Shakespeare takes care to keep his audience continually surprised and refreshed by alternating between dialogue and soliloquy, episodes in which the stage is crowded and others where it is occupied by few, or only one character. These correspond in television time to long shots and close-ups. It is as though the dramatist were signalling from his grave to the director and telling him where to place his cameras and how to focus his lens. Both directly and indirectly Shakespeare has profoundly influenced the language of film and television. But that is the subject for another article.

The author is dean of graduates at Worcester College, Oxford.



Dale Spender argues that education is man-made and male-managed . . . where it is almost impossible for women's voices and experiences to penetrate.

In Britain, we are confronted with the startling statistics presented by Eileen Byrne that throughout the educational edifice 97 per cent of the policy and decision makers are male; and

For those of us who are not their own, and we are not insignificant in number—this male monopoly on education can be quite distressing. We may generate our own models of teaching and learning (as some of us are doing in Women's Studies courses), we may construct our own knowledge about women and men from our understanding of the world, and in doing so we may challenge, not only the content, but the validity of many of the social sciences. But we do not often have the power to introduce our new models which are consistent with our experience. Almost invariably as part-time, temporary, or adjunct

of teacher and student. But when women try to instigate their model – which is consistent with their experience – they are likely to encounter male control and to be informed that their methods of teaching and learning are insufficiently rigorous, insufficiently discriminatory, and constitute a lowering of the male standards.

For women, for whom co-operation and negotiation may make more sense in terms of both living and learning, the values of the current educational model which encourage isolation, competition, mastery and dominance – in many forms – could look absurd if they did

In one sense it is unfair to single out the *British Education Index*, for its practices are essentially no different from many of the other agencies which construct educational "truths". The editors of newspapers, journals and publishing houses are also predominantly male and work in institutions

Women's experience and concerns can almost inevitably be perceived as peripheral and deviant - while men remain in control. It is not just the interest of women that I argue is the entry of women's conceptions into the formulation of educational policy and practice. In the long term it is also in the interests of men. Perhaps the possibility of future advantage or interest or persuade them; but perhaps they find this whole issue insignificant, irrelevant, inappropriate, and of little merit - by their standards.

by John Herivel

On the other hand, while emphasizing the primary importance of Newton's achievements in science and mathematics, achievements which indeed provided the justification of his biography, is concerned with setting Newton against the larger background of Newton's intellectual and moral character, and of his life and times. This enables us better to understand the possibility of these achievements.

Bernard Cohen's book is made up of two distinct but related parts. Part I deals with the Newtonian revolution and the Newtonian style.

great a part of the writings in the volumes of Whiteside and Hoskin's magnificent edition of Newton's mathematical works, Isaac Newton might still have presented historians

Sir James Thornhill's portrait of Newton at sixty-seven

His study of Newton has only served to heighten his admiration for his subjects' intellectual powers. Yet he makes no attempt to whitewash Newton, nor to skate over the glaring character defects shown up by the controversies with Hooke, Flamsteed and Leibniz. Unlike Frank E. Manuel, however, in his *A Portrait of Isaac Newton*, however, he wisely withholds judgment both on Newton's treatment of "coiners and clippers", and on his liking for brilliant

To assess the relative importance of the various parts of the *Principia* is impossible within the bounds of a review. I shall simply reiterate my

John Herivel was formerly reader in the history and philosophy of science at the Queen's University of Belfast.

BOOKS

A rediscoverable poet

Skelton: the critical heritage
edited by Anthony S. G. Edwards
Routledge & Kegan Paul, £10.50
ISBN 0 7100 0724 8

Skelton has been outside the mainstream of English poetry ever since Puttenham downgraded him to the rank of mere buffoon near the end of the sixteenth century; yet in every period since, there has always been the occasional enthusiast who rediscovers him and becomes deeply and personally committed to his verse. Such a one is Robert Graves, for example, whose involvement with Skelton led him to treat the poet almost as his own private property, and to attack as interlopers any other critics who strayed into his territory.

From the eighteenth century onwards this has produced lively and readable Skelton criticism, but the editor of this collection has the problem that the best and most committed critics have always seen themselves as missionaries with the task of re-educating their generation in the basic knowledge concerning a forgotten poet. In consequence most of the longer essays contain a selection of the same traditional anecdotes about Skelton's life, and a general survey of each of his major poems, with copious quotations. The critical comments form a relatively small part of the whole, and virtually all the longer pieces in this volume, from Warton to E. M. Forster, could be shortened without loss, if there were any other Skelton criticism to put in their place. Professor Edwards has shown great enterprise and scholarship in digging out relevant material, but it is a difficult task, and many of his shorter excerpts are references rather than criticism.

Professor Edwards's introduction

surveys the changing critical attitudes to Skelton himself, but makes little attempt to relate them to the periods which produced them, although this is surely a major concern of the Critical Heritage series. Indeed, Skelton criticism, for all its scarcity, provides an interesting history of taste. The very high reputation which Skelton enjoyed during the early years of the sixteenth century stemmed from his "humanism" which, though hostile to the avant-garde interest in Greek, was solidly based in Latin and agreeable to the contemporary taste of an England to which the full Renaissance came rather late. By the last quarter of the century, however, when the Renaissance had been assimilated in England, Puttenham and Gabriel Harvey can look down from an assured plateau of achievement and dismiss Skelton as a mere vulgar poet in the lowest rank of the literary hierarchy. This estimate is still current as late as Pope's famous comment on "beastly Skelton", but by this time he has been rediscovered by a new breed of critics, the antiquarians. The introduction to the reprint of *Elynor Rumming* in 1718 shows the same patronizing tolerance toward the achievements of a primitive age as that of Addison in his essay on *Claydon Chase*.

For the Romantics, Skelton was an original whose inartificial use of the language of the common people chimed in well with the assumptions of the *Lyrical Ballads*. The Victorian critics for the most part praised him with a liberal voice and used him as an occasion for fine writing, discovering, too, in his scurrility a useful stick with which to flog the sentimentalities of contemporary medievalism. In the twentieth century, predictably enough, the emphasis has fallen on verse technique and the personal response; and this

has undoubtedly produced the most sensitive and stimulating criticism of all. It is a pity, however, that Professor Edwards has included none of the very scholarly criticism which is equally characteristic of the last 50 years. An excerpt from H. L. Edwards on Stanley Fish on the meaning of *Spoken Parrot* would have been a welcome addition to the volume, and incidentally, done justice to a poem which most earlier critics have been content to avoid.

Professor Edwards provides us with his selection, but with a slight unfocused eye upon the nature of the audience. He annotates "Rider" and "Calliope", for example, but the difficult line from the "Chronicler" of 1510, "they myghte Inglysh Ryffe"; and the sort of metaphor which the Critical Heritage on Skelton is unlikely to need, that L. M. Forster was "one of the most distinguished novelists of the twentieth century". The editing is careless, and I have more than a dozen misprints, or of punctuation which seriously tortures the meaning, and in some transcription of the original including the archaic *the* between the "t" and the "d" of "tust" instead of "put", so on.

The volume is printed photographically from the original script, and although this may be down the cost it produces a dearth of print and a lack of clarity between the types used for letters, notes and text which make for uncomfortable reading.

Maurice Evans

Maurice Evans was until recently Professor of English at the University of Exeter.

Faulkner's secret life

William Faulkner: his life and work
by David Minter
Johns Hopkins University Press, £9.50
ISBN 0 8018 2347 1

A vast amount has been written about William Faulkner over the past few years; so much, indeed, that it is becoming more and more difficult to think of new things to say, fresh approaches to adopt. *William Faulkner: his life and work* does not represent a new approach, but it does at least offer a synthesis of two familiar ones. Drawing on Joseph Blotner's monumental biography, and on various essays and memoirs, Minter tries to establish and define the deep, reciprocal relationship that exists between the life and the writing.

Faulkner was not an autobiographical novelist in any obvious sense; but, as one of his characters puts it in his second novel *Mosquitoes*, "A book is the writer's secret life, the dark twin of a man". Taking his cue from this, Minter explores the different, often puzzling ways in which this secret life is shadowed forth in the work, by pursuing a series of interrelated readings of Faulkner's behaviour, his character, and his narratives.

Faulkner, Minter's succinct way, profoundly divides the person who sought always to delimit and control his contacts with the world. This he did by erecting barriers, adopting masks and ceremonial manners, and by cultivating a succession of highly stylized relationships, in each of which only a fragment of himself found expression. What was hidden or only hinted

at in Faulkner's life, however, was revealed in his novels. For if his life was a fiction in the restrictive sense that it resolved itself into compulsive role-playing, then his work was fiction in the older and deeper sense of significant myth, a reinvention and redisclosure of the actual. Admittedly, as Minter shows, the work was like the life in certain ways—in its indirection, for example, its love of displacement and disguise; and the early poetry is as formal and restrictive as Faulkner's behaviour was, suggesting that he began at least by seeing writing as a defensive manoeuvre, another way of concealing himself, and controlling the world. But all his best fiction, while sometimes evasive, and often crafty, is remarkable for its openness, its sense of adventure and fluidity, and for its willingness to confront things in all their particularity and capacity for change.

Minter is excellent when it comes to describing what he terms Faulkner's oscillation between the worlds of experience and imagination, the way the life fed into the work and the work then exposed the hidden meanings of the life. He is good, too, on particular points: Faulkner's disappointment, for instance, with his fierce, proud mother and his ineffectual father and his consequent sympathy for the emotionally orphaned. The book does have weaknesses, however, some of them perhaps inseparable from Minter's approach. Sometimes, the critical material is too familiar; one hardly needs telling again, for example, that we experience a gradual enlightenment when reading *The Sound and the Fury* or that *Sansarcus* represents a minor miracle of revision. At other times, the rela-

tionship between the art and the life seems highly arguable or substantial. Minter claims that he "tried to wonder in a dispassionate and responsible way", but his readings are offered casually, without much discussion or argument, and seem a result of unnecessary speculation. When discussing *A Lay Man*, for example, Minter declares that were self-evident, that *Ashe* is a "crippledly cynical" and a destructive effect on all his children. One cannot escape the notion that this is because he is relating the novel to a certain aspect of Faulkner's experience, seeing it as another story of his parents.

Still, in the end the strength of the book outweighs its weaknesses. One emerges from reading *William Faulkner: his life and work* with a fresh understanding of both man and writer, with feelings of sympathy and admiration. "I have never," wrote one of Faulkner's brothers, "who identified with his writings more than Bill did. Sometimes it was hard to tell whether he was one of us or not. And yet you knew somehow that he was one of the two of them were one and inseparable." The book demonstrates the truth of this remark in a way that no other book can. It is a book that while, like most of us, we need to be managed to turn life into art and art into a revelation of the truth.

Richard Gray

Richard Gray is senior lecturer in literature at the University of York.

Eighteenth-Century British Books: an author union catalogue lists together items of eighteenth-century printed materials held in three important British libraries, which between them are estimated to contain anywhere between 50 and 80 per cent of the possible total. Drawn from the British Museum General Catalogue of Printed Books and the catalogues of the Bodleian and University College, Cambridge Libraries, the author union catalogue is

edited by F. J. O. Robinson, Averley, D. R. Esdaile and David Wallis, and the first volume, which has just been published by Dawson. The price for the complete set of five volumes is £1,250.

Self-exploitation

The Petite Bourgeoisie: comparative analysis of the uneasy stratum
edited by Frank Bechhofer and Brian Elliott
Macmillan, £20.00
ISBN 0 333 23737 4

Small shopkeepers, small farmers and proprietors of French family bakeries are among the subjects of this remarkably well-integrated set of essays. The book is topical and relevant at a time when starting up small businesses has become fashionable on the right, and small-scale subsistence activity has a following on the ecological left.

The editors are already well known for their research on small shopkeepers and landlords respectively, which they have conducted in Edinburgh over the last decade. It is logical that they should combine their scholarly forces and draw in others to provide a broader perspective and to bring other theoretical arguments to bear on "the uneasy stratum".

The Essex University team, which has contributed so successfully to our understanding of the farm-workers and larger capitalist farmers of East Anglia provide a characteristically well-grounded piece on "Farming for Survival" which, for over 40 per cent of their sample, involves working for more than 60 hours a week.

This work is for a comparatively small return: farmers with large acreages make much more money with the same crop. One study showed that the largest 25 per cent of farmers made, for example, £82 an acre more from potatoes than the small farmers.

Perhaps the most fascinating chapter, which deserves a wider and less specialized readership, is that by Daniel Bertaux and Isabelle Bertaux-Wraime on artisanal bakeries in France. Since I suspect that many of my readers will be buying their baguettes before very long they might be interested and chastened to learn something of the burdens imposed by the expectation that hot croissants should be available virtually everywhere throughout France by 8 am every day. As many as 97 per cent of the 50,000 or so bakeries in France employ no more than five people; 13,000 of these have no employees, and 28,000 employ only one or two persons.

The authors have collected about 40 life-histories of bakers and bakery wives, and the account of the amount of work still necessary today is staggering. They have to start early in the morning six days a week and spend Sunday recovering from *le double* as customers demand twice the amount to cover the time when they are closed. A nap after lunch might be possible but the normal working day is still an average of 15 hours. Their wives have to keep the shop open from 7 or 8 am in the morning until 8 pm with "no salary, no social rights whatsoever and no property rights either".

Wives also do the work of housewife and mother. Very often the goodwill of the business is largely dependent on the personality of the wife. The boulanger's work during the day, whereas the husband works at night. To become self-employed, the bakery worker needs two things: money and a wife.

How long can the French expect to get their baguettes and croissants from a background of such unremitting toil? Sons and daughters don't want to follow their parents, and the supply of apprentices is becoming increasingly dependent on immigrant labour. Perhaps French bread in the 1980s will all be baked by Algerians—that is

unless the supermarket bread takes over completely.

So this uneasy stratum resents the big capitalist organizations and fears the danger of "falling" into the working class. They are self-exploited and thus perpetuate their stratum by handing on land, property, goodwill or skills either to their children or, like the French bakers, to apprentices. The petite bourgeoisie represents a form of freedom which those who have suffered other and more intolerable subordination seek out. Those, too, who are downwardly mobile or who suffer unexpected redundancy may join the ranks of small businessmen as a more socially attractive alternative to the degradation of wage labour. For these reasons the petite bourgeoisie is unlikely to disappear, however inadequate the financial rewards. As Bechhofer and Elliott conclude, "in all circumstances it is a dependent stratum; dependent first and foremost on the dominant economic groups and institutions. It is their decisions, their interests, that do most to affect the size and circumstances of this stratum".

This is made most plain in Suzanne Berger's analysis of the "traditional sector" in Italy, which seems entirely at the mercy of political manipulation. Chris Gerry and Chris Birbeck, in their essay on "The Petty Commodity Producer in Third World Cities" refer to the well-established distinction between defining the petite bourgeoisie by occupation and defining it by ownership of capital and control over the production process. By this latter definition, since the petite bourgeoisie does not employ the labour power of others, it is qualitatively different from simply being capitalists on a smaller scale. The authors draw on their field research in Dakar and Columbia to illustrate the distinctiveness of petty commodity production.

The other essays in the book are by Franz Urban Popp, who writes more theoretically about ideologies of the middle strata in German society, and J.F. Conway who provides a historical discussion of populist politics based on the small farmers of the Canadian mid-west. Bronislaw Mizal contributes on the unusual topic of the petite bourgeoisie in Polish society: not surprisingly small shopkeepers and the like are "a vestigial social group" occupying the geographical and social backstreets of the society.

The editors raise a most interesting issue in their succinct concluding essay. They see the right wing of the Tory party, helped to some degree by the media, using the petite bourgeoisie as a means of "remoralizing capitalism". They argue that one of those periodic "retrospects" is underway, in which the joys of a simpler, freer, more competitive economy are sung, in which the multinational supposedly are famed and wished away, in which the invisible hand steers individual competition along paths of efficiency, prosperity and freedom.

From the evidence of this book to be a small farmer in Suffolk or a baker in France is to be condemned to a life of pretty much unrelieved drudgery. Maybe self-oppressed "workaholics" will help to make capitalism safe for the large corporations, but I doubt whether moral revitalization on the part of small grocers' values will be a very liberating experience for those concerned.

R.E. Pahl

R.E. Pahl is professor of sociology at the University of Kent at Canterbury.

A. J. Walford's well-known *Guide to Reference Material*, a three-volume work, has now been condensed by the author to a one-volume *Concise Guide to Reference Material*. This new edition

comprises 2500 entries, including many that bring the larger work up to date. It is published by the Library Association at £14.75.

BOOKS

Learning from the Pathans

Process and Form in Social Life: selected essays of Fredrik Barth
Volume one
Features of Person and Society in Swat: selected essays of Fredrik Barth, volume two
Routledge & Kegan Paul, £13.95 and £14.95
ISBN 0 7100 0720 5 and 0620 9

Fredrik Barth is a Norwegian, trained at Chicago, the London School of Economics, and Cambridge. Having built up a strong department of anthropology at the University of Bergen, he is now director of the Ethnographic Museum and professor of anthropology in the University of Oslo.

He has done fieldwork in more cultures than most anthropologists of similar stature, though the brevity of each field study has allowed some critics to take his writings less seriously than those resulting from several years' immersion in a single culture. His major publications include a seminal monograph on politics among Swat Pathans (1959), a much-read pioneering study of Persian nomads (1961) and an intriguing edition of a deceased colleague's field-notes from Baluchistan (1966). An excursion to New Guinea led to an important study of ritual and initiation (1975), while the main results of more recent research in Oman, and his return to Swat, are yet to appear. In the meantime these two volumes make clear the consistency in his approach over twenty-five years.

Social anthropology in the 1950s was dominated by structural-functional models and assumptions, which viewed social behaviour as patterns, or forms, determined by moral rules attached to roles, relationships and membership of groups.

Analysis concentrated on these normative rules, and societies were classified in terms of different systems of rules. Barth was in the forefront of those who, dissatisfied with the ability of this approach to deal with problems of social change and comparison, viewed behaviour rather as processes resulting from people's choices between alternatives. He focused on "transaction", the process through which people "try to assure that the value gained for them is greater or equal to the value lost".

Although his work is firmly aligned with the "transactionalist" trend of the 1960s, Barth makes clear now that he prefers to be associated with the development of the study of social processes (of which "transaction" is only one type) and with the "generative models" by which he attempts to explain these social processes. Barth's approach, represented by the papers collected in the first of these volumes, has had numerous critics. However, they often seem to have misunderstood his methods and intentions.

In two new papers in the volume, Barth elaborates further on his central concepts. He castigates those who have elevated "transaction" to the status of a theory, and dissociates himself from any "ism". He has no more time for French structuralism and neo-Marxism than he has for earlier fashions such as functionalism and historicism. Odder, given the importance in his work of such concepts as "generative" and "transaction", is the absence of any reference to linguistics, from which these terms presumably derive. However, with the theme of "person" ("the total repertoire of statuses held by an individual at any one time") that he has now drawn out of his Pathan analyses and incorporated into the title of the second volume,

Barth has associated himself with a current anthropological interest.

Barth states that he has been influenced less by academic predecessors and colleagues than by his fieldwork, and that his experience of living with Pathans was most formative for his thinking. *Political Leadership among Swat Pathans* (Athlone, 1959) was a landmark in the reaction to structural-functionalism and in the reintroduction of the analysis of society. On the whole, Barth's ethnographic accounts are more lucid than his theoretical essays; none the less, given that a number of critics who have misrepresented this Pathan monograph have been widely applauded, he has found it necessary, in the long new essay with which he concludes the collected articles in *Features of Person and Society*, to reiterate some of the major points of his Pathan analysis and to spell out his approach.

To some extent Barth himself must bear the blame for misunderstandings of his arguments. His analytical language is not always easy to follow, a difficulty which arises from the conciseness and density through which he seeks precision of meaning. It is further complicated by his not always consistent use of terms.

Barth modestly doubts whether his essays "add up to a complete and unified theory of culture and/or society". Perhaps not; but those interested in one of the more consistent and workable approaches currently offered by social anthropology will find that these volumes repay careful reading.

Richard Tapper

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Who wants to be a millionaire?

Men of Property: the very wealthy in Britain since the industrial revolution
by W.D. Rubinstein
Croom Helm, £12.50
ISBN 0 85664 674 1

Which of the following places produced more nineteenth-century personal (non-landed) fortunes than any other in Britain: (a) Birmingham, (b) Liverpool, (c) Manchester, (d) Sheffield, (e) none of the above? If you know the answer was (e) because it was Burton-on-Trent you may have already read Dr Rubinstein's book. If not and you do read it you will learn many other facts about past wealth holders.

Some of them confirm conventional views, for example that the distribution of wealth was exceedingly unequal in the 1850s or that the best way of trying to die rich was to have been born the son of a rich father. Some of them are new, for example those describing the wealthy in different occupations. Colliery owners were mainly Tories and, like brewers, Anglicans. Chemical manufacturers in contrast were commonly Liberal dissenters, while cotton magnates included a very high proportion of MPs, and shipowners were the most typical of the stylized nineteenth-century "pushing rough-heaven self-made men".

Rubinstein's book is largely based on the values of estates left at death as valued for Probate. It sets out to document the economic, regional, political, religious and other changes in the characteristics of the wealthy since the industrial revolution, and is not without touches of humanity and of humour. Thus Sir Charles Tennant, the richest Scot of the nineteenth century, died childless born 53 years apart (said to be a record for monogamous couples); no English millionaire made his money in any period in British history before the slave trade; and the 1890 Baring Brothers crash left the First

Baron Revelstoke with a mere £37,000—"the Baring equivalent of begging in the streets".

Men of Property is a work of history. Although it contains a table every five pages, on average, it does not use sophisticated statistical techniques. The tables are no more than convenient ways of summarizing the considerable quantity of data that the author has collected. It is also an ambitious book and the author is not shy about drawing conclusions relating to a number of broad trends he claims to have identified. The supporting evidence for them is, however, at times decidedly slender, as might be gleaned from Rubinstein's frequent use of the words "possibly", "probably", "perhaps", and even "probably perhaps". This is not because of the imperfect quality of the data. I accept the author's view that to deny the use of other than impeccable data sources would be to prevent the writing of virtually any history. Rubinstein is, moreover, aware of most, if not all, his data deficiencies (though discussion of them is too often relegated to footnotes). My reservations arise from his reluctance to do much to improve the data and to define some important terms.

There is the author's decision not to attempt any adjustments for changes in the value of money over a period of almost 200 years and to take as his sampling frame estates fixed in nominal money terms. This is a point of general concern, but it is particularly relevant to the period since the end of the Second World War. A millionaire in the 1970s was so different an animal from one of the 1950s, let alone of the 1850s, that one wonders how comparisons between their number can mean much. Rubinstein states that "there have possibly been more genuine English millionaires made his money in any period in British history" (page 240). Since he does not

define "self-made", it is hard to know what to make of the statement. He surely cannot be referring to *absolute* numbers which one would expect to be high simply because of the size of the population, the price level and the value of average wealth.

A second matter is that Rubinstein's data are, despite his preferred nomenclature, of *wealth-leavers*, not *wealth-holders*. Had he taken some account of the ages at death of his conclusions might be different—for example that "the Indian summer of British capitalism" was the late 1930s, rather than the 1920s.

A final issue is the reticence with which some success and failure rates in the research are reported. He talks of 2 per cent failure rates with one sample and "a much higher percentage" with another, but how much more? This is not a trivial matter because there is good reason to suspect biases in samples drawn of the wealthy. It is particularly worrying in the light of the author's own description of the probable accuracy of the probate statistics in the period since 1945. He points out rightly that increasing prevalence of estate duty avoidance practices at the time made the data less complete, but nevertheless calls the statistics a "random sample" which they are surely not.

Although Rubinstein draws together a lot of interesting and instructive information about men of property, many of his conclusions are insufficiently supported by the evidence. The book is very readable, however, and one hopes that it will stimulate further research.

Colin Harbury

Colin Harbury is professor of economics at The City University.



"A scene in the green room", a drawing by Phil for Sketches in London (1838), taken from Paul Sheridan's Penny Theatres of Victorian London, published by Dennis Dobson at £5.95.

Characters in crisis

George Meredith: a reappraisal of the novels
by Mohammad Shaheen
Macmillan, £15.00
ISBN 0 333 24007 3

Mohammad Shaheen begins his book by quoting some of the views expressed in 1960 when Meredith's inclusion in the Cambridge University English syllabus was under discussion. Meredith is somewhat better known today than he was then, but he is still scarcely a popular author, even among academics.

Dr Shaheen, like all admirers, hopes to make him more accessible, and this book, concentrating on five of the novels, is apparently directed to an undergraduate readership. If so, the omission of *The Egoist*, the novel which students usually find most approachable, is a little eccentric. Although no direct statement is made, it seems to have been omitted because its theme is characterized by "dry reason", a view to which Meredith himself gave some support when he said that "it comes mainly from the hand and has nothing to kindle imagination". However, this is surely one of those places where the author's own judgment is not to be trusted, since the gaiety and lyricism of *The Egoist*, for all its serious satirical purpose, can certainly defend it against any charge of dryness.

In his introduction, Dr Shaheen sets out to establish that Meredith was not "Victorian", using the term to mean a writer who sought to appeal to the tastes of the Victorian public. "Comedy is the only aspect of Meredith that can be described as 'Victorian'", he says, rejecting the familiar approach to Meredith through his own conception of comedy as outlined in his famous essay on the subject. The discussion of egotism as a central issue is also rejected, as is the tracing of the *Bildungsroman* theme of education, which Dr Shaheen sees as "in these novels a façade". Instead he elects to return to a traditional discussion of fiction through characterization, taking Meredith's comments on the relative unimportance of plot in a letter to George Bainton as a starting-point: "I do not make a plot. If my characters as I have them at heart before I begin on them, were boxed into a plot, they would soon lose the lines of their features".

In the five sections which follow, Dr Shaheen attempts to pursue this course, concentrating on the "revelatory occasions". At times he lapses

into those approaches which he has theoretically abandoned. The sections on *The Ordeal of Richard Feverel*, *Harry Richmond* and *Beauchamp's Career* inevitably deal with the subject of education, surely inescapable when the novels are primarily concerned with the hero's pursuit of romantic and sentimental illusions, a course which Meredith sees as not simply immature, but, in the context of sexual relations, as potentially destructive. The development of this theme in Meredith's later novels led to his achieving a remarkable series of statements about the crisis of personality in his female characters. Perhaps the finest example is *Nataly* in *One of Our Conquerors*. The mistress of a successful businessman, she is forced to live as his wife, but is destroyed inwardly by deceit and uncertainty.

This is probably the most elliptical of all Meredith's novels, and his textual complexity and obscurity represent a problem for many readers of his work. It is arguable that you can only elucidate such density by a close analysis of his methods, as in Barbara Hardy's outstanding essay of 1960, in which her examination of the imagery of *Harry Richmond* revealed the extent of Meredith's subtlety as a writer. Dr Shaheen, in discussing the same novel, goes for broader outlines. He makes a useful comparison with *Great Expectations*, and genuinely illuminates our understanding of the resolution, by suggesting that Harry's marriage to Janet is neither second-best nor a triumph of heart over heart, but a bringing together and banding of the qualities represented by both heroines.

It is probably impossible in a comparatively short book to provide a satisfying approach to Meredith, and in his attempt at a character-based discussion Dr Shaheen is often too general, too much concerned with Meredith's ideas, and too little with his technique. He is most interesting when he writes about the later novels, and particularly about the portrayal of Fleetwood in *The Amazing Marriage*, where Meredith emphasizes the conflict between his character's egotistical need for self-gratification and his spontaneous response to the natural.

Leonee Ormond

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BOOKS

Preconditions for decline

English Culture and the Decline of the Industrial Spirit 1850-1980
by Martin J. Wiener
Cambridge University Press, £9.95
ISBN 0 521 23418 2

The Decline of British Economic Power since 1870
by M.W. Kirby
Allen & Unwin, £10.00
ISBN 0 04 942169 7

Each of these books tries to explain the decline of Britain as an industrial power since the war and both of them view it as part of a century-old historical process. To Dr Wiener it is almost entirely a cultural phenomenon, the 1970s being preceded by a century of psychological and intellectual de-industrialization. He argues his case elegantly with many a felicitous quotation but the essential points, which we have heard countless times before, seem neither more nor less plausible as a result of all these examples. That there are elements in the British way of life prejudicial to economic progress could scarcely be denied; whether they are worse than in other countries is another matter.

The bias of this country's educational system against technology and industry, more particularly in the public schools and the older universities, is undeniable and serious. It is probably true too, that because the industrial revolution was so gradual, society was not transformed in the way it was elsewhere and traditional values and attitudes persisted to a greater extent. But what about the Japanese, who seem to be able to follow a dual way of life with the modern at work and the traditional at home without any apparent evil consequences for their efficiency? Undoubtedly, as Dr Wiener points out, some historians of a genteel background such as Toynbee and Trevelyan decried the industrial revolution—a few poets and philosophers too—but what difference could that conceivably have made to anything? Of course there

was a stark contrast between north and south culturally as well as environmentally, but Glaswegians, Mancunians, Georgians were hardly deterred from taking their own courses by the disapproval of the gentry of Sussex for whom they reserved considerable contempt. In any case, with the industrialization of the Home Counties that distinction became far less obvious.

Dr Wiener's book says a great deal that is interesting about the British and their peculiarities, but it fails to establish a clear link between these social attitudes and economic success. It falls short in two important respects. It does not get to grips with the period after 1945, by which time many of these attitudes had markedly changed and the problem had become one of slow growth relative to other countries rather than one of the absolute level of growth, which was high by all previous standards. It also lacks conviction in an international context, ignoring the fact that France, a land with social snobbery and a legacy of respect for traditional values to a greater degree than Britain, still managed a remarkable transformation of the economy after 1945.

Dr Kirby is on the whole more down to earth, and he offers us five challenging and well-informed essays on the British economy since 1870. Eschewing straightforward economic history, he provides a highly intelligent commentary on the various explanations of the fluctuations in the growth of the economy over that time. Despite, however, excellent passages on particular topics, there is, as with Wiener's book, a large question mark hanging over his basic premise. Can one reasonably maintain that there was a continuous thread of circumstances running through the century after 1870 and bringing about economic decline? Just because the economy had a bad time between 1900 and 1914 and because it was working constantly below capacity between the wars, even though a comprehensive

restructuring of industry came about, it does not follow that the same underlying factors account for more recent problems. One thing Dr Kirby does not make clear is that in 1914 British industry as a whole was still markedly more efficient than German and where Germany had a lead—in chemicals, for instance—it was a tiny part of the whole. The German leap ahead, and the French for that matter, did not come until the 1960s.

Dr Kirby has little time for the Bacon and Ellis view that our recent problems should be attributed in large part to the rise in public and non-productive employment during the first half of the 1960s. This, he says, is unhistorical because it does not accord with his thesis that the origins of our decline lie a hundred years distant. That may be so, but the thesis remains no more than a hunch for we never learn precisely what the roots of decay were. The social attitudes described by Dr Wiener he puts aside in one page, claiming that their direct impact on entrepreneurship is open to question. It may be argued that the fall of the Gentlemen's way of life diverted the attentions of British industrialists—some of them anyway—but equally that should have given more room for the bright new generation of Players coming up, as Professor Coleman once put it. Dr Kirby's concern that the concentration of British industry means that 40 per cent of our exports are sold by only 30 firms, some of them multinational, seems far more to the point.

Students and general readers alike will learn a great deal from this book but, for all its merits, to my mind it fails to prove that our current problems are rightly to be viewed in a long-term perspective.

S. B. Saul

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History as battleground

Origins of the French Revolution
by William Doyle
Oxford University Press, £12.50 and £4.95
ISBN 0 19 873020 9 and 87321 7

William Doyle's intention "to state clearly and concisely how recent research has altered our view of what caused the greatest of all revolutions, and to incorporate our new knowledge into a coherent and credible explanation", does not suggest any dramatic reinterpretation to revive faded historical palates. Yet his is an important book.

First, his readable and perceptive analysis has provided us with a most useful addition to the historiography of this complex event. Secondly, it underlines the impossibility of producing an objective, agreed version of the past. In a long opening chapter Dr Doyle reviews historians' contributions to this subject since 1939, and reminds us of the extent to which the past is a battleground for present debate as much as a quarry from which to unearth opinion and attitudes.

Dr Doyle demonstrates how great has been the influence of the dozen of modern French Revolutionary studies, the Marxist, Georges Lefebvre. His socioeconomic interpretation of the Revolution became the orthodoxy, which was challenged eventually—and dramatically—by Alfred Cobban, who saw the Revolution as an attack on developing capitalism, not an attempt to promote it. Yet brilliant and devastatingly destructive as was Cobban's *The Social Interpretation of the French Revolution* it was essentially a polemic and his position reflected preconceptions that later historians called into question: for example, he attributed little significance to the role of the Enlightenment in preparing the ground for the Revolution, and, perhaps more significantly, he shared with Lefebvre the assumption that the nobility was no more than a selfish and privileged caste.

Dr Doyle's analysis of the historiography of the French Revolution over the last forty years demonstrates how many new avenues have

been explored, controversies evoked, assessments reassessed. In particular, the relationship between the nobility and the bourgeoisie has been much examined, especially American historians, whose work tended towards the conclusion that the two groups had far more in common than had previously been expected. Similarly, relations within these groups have been seen and internal fissures brought to light. In other areas, the continuity of French economic history through the eighteenth century and beyond has been emphasized at the expense of those arguments favouring a revolutionary change of direction in 1789; while the effect of the Enlightenment, recently given more space than Cobban would have allowed, provokes conclusions about the attitudes of bourgeois and noble to appear to contradict their new economic rapprochement. Finally, we observe how the reputation of the last ministers of the régime, Calonne, Necker, Loménie de Brienne, have waned over the last twenty years.

When it comes to his own view of events, Dr Doyle mixes the chronological and the thematic. More recently several institutions of higher education have taken a more utilitarian view of French, concentrating on language and relating it to the social sciences. But in relation to the natural sciences there is usually silence.

There are two main reasons why French science is neglected by departments of French. First, it is not appreciated how important was the contribution of the French (as opposed to, say, the Spanish) to the study of the natural world over the past 350 years and particularly in the late eighteenth and early nineteenth centuries. Secondly, the whole area of science is dismissed as something "technical". It is compartmentalized, associated with modern laboratories, and ignored.

Not all aspects of science, however, are technical and indeed the two books under review represent two contrasting aspects of science which do not lie outside the competence or even the potential interest of the literary specialist or historian: the lives of the practitioners of science and the organization of science and learning. Scientists too should have some interest in the science of the past, especially when the language barrier is removed. France established several major precedents which have come to have wide-ranging influence

J. H. Shennan

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Locating the party membership

The German Social Democratic Party, 1875-1933
by W. L. Guttman
Allen & Unwin, £18.50
ISBN 0 04 943024 6

The author's original plan, he tells us in the preface, was to write a comparative study of European social democracy. Having found such an "all-embracing subject" too tall an order, he decided to confine himself "to something that seemed more manageable". The result is the present study of the German Social Democratic Party.

Certainly the great questions raised by the history of that party have neither been entirely resolved, despite the ever-growing number of publications, nor have they lost their relevance and interest. From the point of view of present-day political controversies, nevertheless, for all the information it contains, this book will probably leave the reader dissatisfied, for the author seems unable to use his information to suggest answers to the unresolved questions.

The chapter on "the political mobilization of the German working class" adds enormously to what is generally known about the pre-1914 electoral and confirms the traditional view that the social democratic vote was preponderantly derived from the industrial working class, especially in the large cities. But it is disappointing that more is not said about the considerations which determined these voting patterns. The only item of evidence we are offered on this, relating to the 1903 elections, seems to cast some doubt on the "revisionist" contention (which is still widely accepted) that the party's avowed revolutionary perspectives

deterred the middle strata from giving it their electoral support. Similarly, the author is content to let the post-1918 electoral statistics speak for themselves. They do, indeed, tell us many interesting things, such as the tendency of the communist vote to repeat the pattern of the pre-war social democratic vote, or the relatively greater impact of the Communist Party in the predominantly Catholic regions and among the unemployed. But in place of explanation, there is only the speculation of others, that the "quasi-religious and authoritarian nature" of the Communist Party may have appealed to Catholic workers, while the "rational argument" of the social democrats may have been lost on the unemployed.

The chapter dealing with membership and organization reveals a significant post-war shift in the social composition of the SPD in the direction of the middle strata, such as officials and teachers. Here, too, the author seems at a loss for an adequate explanation. On one page he suggests, following Jürgen Kocka, that the preferential treatment given during the war to munitions workers and workers in other heavy industries, had worked in a decline in the relative status and living standards of civil servants and other white-collar workers, resulting in a radicalization of their political attitudes. But three pages further on, the reader is told that the influx of middle-class members "undoubtedly" reflected the SPD's emergence into a more responsible and respectable position in German society. If both explanations are valid, further analysis is required.

From the chapter on "mass membership, leadership and bureaucracy", which draws heavily on the work of Thomas Nipperdey, we learn that at

about the turn of the century 50 per cent of the membership attended meetings regularly, while 75 per cent were involved in party work. Clearly, I can't help but agree with what is to be done? were in variance with the practice of the party. The same chapter contains the interesting but irrelevant detail that the party's bureaucracy, the "party officials" in the democratic trade unions, numbered 114 in 1898 to 6575 in 1933. The author is sceptical about what Michels wrote in 1925 on the prospects of social advancement out to humble workers in development. Yet he makes the assumption usually derived from the work of Michels that full-time officials tend to be more responsible and more committed than rank-and-file members. This support only a single item of evidence from a discussion in the *Deutscher Arbeiterkalender* (1925).

The discussion of the ideological evolution of the SPD, which is based on two of the seven chapters of the book, generally reflects the position of social democratic point of view, suffers from being based on a range of sources. The main weakness of this section, however, is that it is unrelated to the factual material in the rest of the book.

Ernst Wangermann

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A water-colour design for a landscape window by Louis C. Tiffany; one of the many illustrations chosen by Robert Koch to accompany the essays of Samuel Bing: Artistic America, Tiffany Glass, and Art Nouveau. First published by MIT Press in 1970, this book is now available in paperback at £6.15.

BOOKS

La Science Française

Science and Immortality: the éloges of the Paris Academy of Sciences, 1699-1791
by Charles B. Paul
University of California Press, £11.75
ISBN 0 520 03986 6

The Organization of Science and Technology in France, 1808-1914
edited by Robert Fox and George Weisz
Cambridge University Press, £15.00
ISBN 0 521 23234 1

In most British universities the study of "French" means the study of French literature through the medium of the French language. The literary approach can be quite wide-ranging, embracing the history of ideas and society, or it may be more restricted. French universities provide courses (of varying quality) in "French civilization" for foreign students and it would be nice to think that all graduates in French here had a good idea of what the country of their special study had contributed to the modern world. More recently several institutions of higher education have taken a more utilitarian view of French, concentrating on language and relating it to the social sciences. But in relation to the natural sciences there is usually silence.

There are two main reasons why French science is neglected by departments of French. First, it is not appreciated how important was the contribution of the French (as opposed to, say, the Spanish) to the study of the natural world over the past 350 years and particularly in the late eighteenth and early nineteenth centuries. Secondly, the whole area of science is dismissed as something "technical". It is compartmentalized, associated with modern laboratories, and ignored.

Not all aspects of science, however, are technical and indeed the two books under review represent two contrasting aspects of science which do not lie outside the competence or even the potential interest of the literary specialist or historian: the lives of the practitioners of science and the organization of science and learning. Scientists too should have some interest in the science of the past, especially when the language barrier is removed. France established several major precedents which have come to have wide-ranging influence



The Paris Academy of Sciences, founded in 1666

on the whole of modern science.

To study science through the biography of scientists is to provide a welcome human perspective, and the system of éloges may be seen as public relations exercises. Is the scientist always dedicated and objective, renouncing pleasure and profit to dedicate himself wholeheartedly to the study of nature and the mental and material improvement of humanity? If this was quite a common view of scientists until Watson's *Double Helix* of 1968, Charles Paul argues that this is largely due to the influence of the eighteenth-century éloges, particularly those of Fontenelle (1657-1737), who have some interest in the science of the past, especially when the language barrier is removed. France established several major precedents which have come to have wide-ranging influence

as much for the literary scholar as for the historian of science. Although science is often described in the eighteenth century as a branch of literature, it had already begun by its vocabulary and use of mathematics to create something of a barrier. The secretary of the Academy helped explain science to the general public. Yet the éloges were concerned with moral matters as much as with nature.

Charles Paul organizes his analysis of some 200 separate éloges sensibly in terms of the issues and controversies of the eighteenth century: Cartesianism, taxonomy, utility, and so on. He confirms in chapter five what others had suspected, that most Academicians were obliged to earn a living in a field quite unconnected with science. Was not Lavoisier a tax-collector? The book is buttressed by the apparatus of scholarship and in many ways will find a

place in bibliographies as an appendix to Roger Hahn's book on the eighteenth-century Academy. In so far as it is concerned with the public image of the scientist, it deserves to be more widely known.

The second book, consisting of papers by ten sociologists and historians of science is a rather more ambitious work. The title is slightly misleading, since the majority are interested primarily in the late nineteenth century, and the book tends to presuppose a knowledge in the reader of what the editors call "the golden age" of French science at the beginning of the century. However, in their successive introductions they have done much to paper over the cracks and provide useful organizing themes: "the university" (that is, higher education), technical education, and "the advancement and diffusion of science".

The book has many merits and the detailed information it contains will be of value not only to historians of science but to many modern European historians and social scientists. It provides a further reminder of the richness of French archives and it constitutes something of a landmark in its insistence on the quantitative presentation of data. The evidence presented undermines earlier suggestions that there was a serious decline in French science in the nineteenth century.

The main criticisms likely to be levelled against the book concern the omissions. Although attempting to be comprehensive, it is highly selective. Thus, representing the grudes cloges, Ecole Polytechnique. Instead of a survey of medical education, we have a view of the politics of medical education from 1870. The book therefore has to be regarded as complementary to other studies, which will be found listed in the various sections of the comprehensive bibliography. With these reservations the book deserves to be well received and will help to open out an area where there is still plenty of basic research to be done. With its detailed documentation and many tables, it is obviously intended for specialists.

Maurice Crosland

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Counting the cost of corrosion

Basic Corrosion and Oxidation
by John M. West
Ellis Horwood, Wiley, £19.50 and \$6.90
ISBN 0 85312 196 6 and 282 2

The economic cost of corrosion to modern technological societies, which are inevitably based on the extensive use of metals, is well established. The Hoar Report to the Department of Trade and Industry estimated that in 1970 corrosion of metals cost Britain some £1350 million (3.5 per cent of the GNP), of which about £365 million might be saved by the application of existing methods of corrosion prevention and control; corresponding figures for 1980 are of the order of £4,000 million and £1,000 million. To this must be added the cost of corrosion in terms of safety, health, aesthetics and waste of scarce energy and materials. It is therefore becoming widely accepted that all underdeveloped metallurgists and engineers should attain at least a basic understanding of corrosion and of available methods for its prevention and control.

Corrosion science and engineering, however, are quintessentially interdisciplinary. To provide students from disciplines as diverse as metallurgy, chemical engineering, chemistry and mechanical engineering with a basis for understanding the subject and approaching the challenging technical problems that it still presents (ranging from the effects of

interactions between stress and corrosion to the distribution of potential over a cathodically protected oil rig) the ideal undergraduate textbook on corrosion and oxidation requires major inputs from chemical thermodynamics, electrochemistry and physical metallurgy, and elements of fracture mechanics, mass transfer, mathematics and microbiology. This is the task that Dr West has set himself.

Chapter one provides a very brief introduction to the subject, and outlines the "self-teach plan" which is central to the design of the book. Chapters two to four provide the basic thermodynamics, chemistry and electrochemistry required for an understanding of corrosion science. However, although there are few students who would not find the rigorous presentation of this material in three successive chapters useful, it does take up a quarter of the 300 pages of text. Furthermore, the corresponding chapter on the basic physical metallurgy and material science does not appear but would be necessary for most of the chemistry and many of the engineering students who will use the book.

Chapters five and six deal with the thermodynamics and kinetics of corrosion in aqueous environments, chapter seven with measurement of corrosion rates and analysis of corrosion products, and chapters eight and nine with localized attack and surface films. It is in these chapters that the author displays his somewhat idiosyncratic approach. For example,

in most treatments of the subject, potential-pH (Pourbaix) diagrams are seen as a natural extension of the thermodynamics of corrosion and the concept of a mixed corrosion potential as being most readily illustrated by means of Evans diagrams. Dr West, however, prefers to deal with the corrosion potential, which is essentially a kinetic concept, in the chapter on the thermodynamics of corrosion; and with E-pH diagrams, which are essentially based on equilibrium thermodynamics, in the chapter on surface films. There can also be few other authors who would treat pitting corrosion before dealing with passive films.

Chapter ten deals primarily with microbial corrosion, dealing phenomena and corrosion in flowing environments, chapter 11 with prevention and control of aqueous corrosion, and chapter 12 with stress corrosion and corrosion fatigue. This latter chapter includes a useful introduction to fracture mechanics but again the subsequent treatment is rather unusual. Specifically, an attempt is made to present stress corrosion and corrosion fatigue only in terms of stress intensity factors and energy considerations. The student with no background in corrosion science or engineering, and following the "self-teach plan", would gain no real insight into the great practical importance or the basic phenomenology of these processes. Furthermore, the author does not here distinguish clearly between those concepts, equations, and so

on, that are widely accepted and those which are speculative or controversial.

Chapters 13 to 15 deal with high-temperature corrosion and oxidation and treat respectively the basic thermodynamics and the various growth mechanisms of oxide films and the control of oxidation. The final chapter presents three case-studies relating to a ship's hull, a sulphuric acid cooler and a jet engine component. Most chapters have short but useful and well-selected bibliographies. There is a list of some relevant standards, some 70 numerical questions and answers, and an adequate index. The book is profusely illustrated with line drawings and there are many tables of basic data. One of the weaknesses of the book, however, is that it contains only six photographs.

The book does represent, however, an interesting and unusual attempt to meet what seems to be an impossible specification. Although many will disagree with the balance of the material presented, every university library should have a copy but few undergraduates should choose it as their only text on corrosion and oxidation.

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Galaxies

Galaxies
by Timothy Ferris
Thames & Hudson, £20.00
ISBN 0 500 012 482

Galaxies are the big daddies of astronomy. In a subject which is permeated with huge masses, immense distances and aeons of time, galaxies usually top the poll. Our own Milky Way has a mass 47 thousand million million times that of planet Earth and contains about 600 thousand million stars.

We cannot easily quantify the aging process of the Universe by observing our own stellar system. William Herschel summed up the problem by comparing the heavens to a luxuriant garden. "It is not almost the same thing," he said, "to witness the germination, blooming, foliage, fecundity, fading, withering and conception of a plant, as it is to view at one time a vast number of specimens selected from a range of plants and from every change through which the plant passes in the course of its existence." In galactic astronomy the observer does the latter. He sees today a vast range of galactic types and from this he tries to piece together the origin and evolution of these giant stellar systems.

Ferris divides his study of galaxies into six chapters. He starts with the Milky Way, briefly mentioning our star, Sun, before we quickly pass on to the Orion Arm of the galaxy, the nearest arm to us. The prominent objects in the galaxy are catalogued, including stars, dust, nebulous gas clouds and star groups, both open clusters and the much older and more compact globular clusters. A brief review of stellar evolution mentions the birth of stars and their more spectacular demise, with black holes, supernovae remnants and planetary nebulae to the fore. The next chapter investigates the Local Group, the family of galaxies which has the Milky Way as one of its offspring. Here, Ferris looks at the two Magellanic Clouds - ragged satellite galaxies to our system, and at Andromeda - the nearest large spiral.

Chapter three reviews the classification of galaxies: elliptical ones that vary from spheres to cigar-shaped objects; spirals that differ in the relative size of their central nuclear concentration and the length and degree of winding of their arms; and strange spirals with stellar bars through the nucleus and star arms leading from the end of the bars. Interacting galaxies and galactic collisions are considered in the next chapter and the book ends with a review of clusters of galaxies, superclusters, and the relationship of the galaxies to the origin and expansion of the Universe.

The photographs of galaxies, nebulae and stars are magnificent. Full use is made of the large page size and many of the plates are in colour. I cannot remember seeing such excellent reproductions of favourites like the Trifid, Eta Carinae and Lagoon Nebulae. Sarah Landry's line drawings and illustrations showing galactic characteristics, groupings, interactions and evolution, are first class. Her figures depicting nearby galactic groups, the formation of tidal and ring galaxies, the expansion of the universe and the spatial distribution of the members of the Local Group are most useful. The book is worth buying for its photographic reproductions and illustrations alone.

However, the text is awful. Ferris adopts the familiar linking device of the inter-stellar space ship and encourages us to imagine ourselves on board such a ship.

A strong stomach is required to read this book. The text tells you much more about the excesses of the American language than it does about galaxies.

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